REFERENCE ONLY

UNIVERSITY OF LONDON THESIS

Degree PhD Year 2006 Name of Author KARKIS, M.

The Acoustics of the 'Self'
discovering the voices of the 'I'

MIKHAIL KARIKIS

The Slade School of Fine Art
University College London

This document is submitted for the degree of
Doctor of Philosophy in Fine Art

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Abstract

This thesis is a methodological experiment, which employs academic writing and artistic practice to explore notions of the 'self' through the study of voice and sound. It is presented in two formats (an audio-book and a text with two audio cds and a dvd) and is divided into two chapters. *Chapter One* invents an author-character who describes a journey through a mythical forest and *Chapter Two* continues with the same character's physical journey through the city. The text of both chapters is narrated by the voice of the author-character. The first chapter studies different versions of the classical myth of Narcissus and Echo. In the journey through an enchanted forest presented in the ancient tale, the thesis discovers a representation of an inner quest for 'self-knowledge' and discusses the series of disruptive encounters that take place between the 'self' and its vocal and visual reflections. The chapter concentrates on the processes of disintegration in the optical and the acoustic realm described in the story. Further, the work focuses on the mythical anthropomorphisation of voice and examines its foundational role for the emergence of the 'self'. Throughout *Chapter One*, additional voices create an acoustic setting; they are inserted at various moments to function as 'musical' studies, introductions, interludes or conclusions to textual sections. These voices discover points of vocal rupture and place voice under forces that expose its physical limits; they explore the materiality of voice and reveal its power to transform and evoke the presence of a complex, fragmented 'self'. Through the exposition of different voices and the study of the myth of Narcissus and Echo, *Chapter One* interrogates anew the complexity of the emergence of the 'self', discusses the inextricable connection between sound, voice and subjectivity, and examines the problems that arise in self-reflection and the figural representation of the 'self' through sound and image. It demonstrates that these fracture and dislocate the 'self' in the very movements that give it shape. *Chapter Two* narrates a physical and a sonic journey through the city, which unfolds through a series of acoustic events: the creaking of the door, a bang in the street, the crackle of the telephone and an incomprehensible word shouted by a passer-by. These initiate a discussion on the relationship between sound, the 'self', its surrounding and modern technology. The project defines this as oto-biographic writing – a word whose sound refers to 'the writing of the self' (autobiography) but whose written form refers to a kind of writing that is inspired and guided by the oto, the ear. The thesis understands sound as an intellectual compass and meditates on our ontological connection with it. Further, the text explores the interconnection between image and sound, discussed in *Chapter One*, through the use of vivid visual language to describe sonic phenomena and make conceptual observations. The second chapter elaborates on the sonic understanding of being, and concludes with the realisation that sound can trigger an inner journey through which the 'self' transforms. *Chapter Two* discovers the humming voice as a kind of 'self-reflection' wherein the 'self' metamorphoses, vanishes and emerges at the same time.

Contents

WRITTEN VERSION OF THE THESIS

Acknowledgements

This project has been developed and realised with the support of many people. I am grateful to my supervisors: Prof. Normal Bryson for inviting me onto the doctoral programme, encouraging this project and for letting me catch a glimpse of the intensity of his thought; Dr Penny Florence for respecting my idiosyncratic work-rhythm, for her positivity, poetic and bibliographic suggestions, her encouragement and close proofreading of my text; artist/film-maker Lis Rhodes for her immense support and enthusiasm, her inquisitiveness, her 'tolerant ears', for her openness and extraordinary ability to discover noise in communication and music in mis-communication. Thank you all.

I would like to thank the people that have given their voice(s) to my text in the audio-book version of this project – artist/filmmaker Uriel Orlow, editor of the *Public Catalogue Foundation* Sonia Roe, poet Cherry Smyth and performance artist Joshua Sofaer. Thank you for your patience, your dedication and...endurance!

I would like to thank singer/composer Björk for including some of the music appearing in the audio-book version of this project on her *Army of Me* album for Unicef and for promoting it internationally. Also, I thank the record label One Little Indian Ltd for publishing it worldwide.

I thank my family for their limitless generosity and for helping me realise this project.

My greatest thanks goes to Uriel Orlow for his endless intellectual, emotional and technical support throughout this project, for his patience, generosity and care. Thank you.

Preface

Since I began working on the research that has culminated in the present project, I have been asked numerous times 'what my PhD is on'. My reply that it is on "sound and the 'self'" has almost always prompted a reaction of surprise and further questions: 'what sound: music, voice or noise?' or 'what is your practice: music composition?'. Indeed, I have asked myself similar questions repeatedly. Significantly, however, I was rarely asked "what 'self' is"; there almost always seemed to be an unspoken (mis)understanding of the notion of the 'self' as a psychoanalytic construct – as something inextricably connected to vision and self-reflection, which begins to take shape in the Mirror Stage as it is described by Jacques Lacan. The above questions become more acute, but perhaps are also answered by the fact that I am neither a formally trained music composer, nor a psychoanalytic theorist. Consequently, my aim has not been to produce a music score or to engage in a theoretical exercise, which deals with psychoanalytic thinking. Rather, I am exploring an area of knowledge that is related to the cultural study of sound, the implications of modern technologies upon our sonic environment and the understanding of subjectivity through these. However, the influence of psychoanalysis in discussions on the 'self' is inescapable; thus, this project first re-visits one of the founding myths of psychoanalysis and attempts to re-think of the relationship between sound and the 'self' described in it.

My concern with sound guided the theoretical content of the project as well as the actual writing. The text describes concepts and itself becomes a tool to explore and demonstrate 'sonic' ideas; writing is inscribed in theoretical thought and itself develops and contributes to it.

Furthermore, in my practice, the presentation and actual experience of a work are not divorced from the ideas and processes that bring them into being. There is a constant negotiation and 'collaboration' between ideas and materials; and it is through this 'collaboration' that on the one hand, I wish to explore the multifaceted ways in which sound (that is itself used a material) can inform intellectual processes and assist in the advancement of ideas, and on the other, I wish to communicate the ways in which conceptual processes further encourage an inventive use of sound.

In the case of this practice-based project, the concern with voice and sound, the notion of the multi-vocality of the 'self' developed in the thesis, as well as the 'performative nature' of the writing have lead to the creation of an audio-book that is the primary version of the project. The audio-book is a four-hundred-minute long composition which consists of the textual part of the thesis read by different narrators, vocal and instrumental compositions as well as environmental sound. The written version of the work consists of the same text that is read in the audio-book with the addition of endnotes, a bibliography and two short textual sections (at the very beginning of each of the two chapters) which provide descriptions of the main character presented in the project. The written version of the work is also accompanied by images, by two audio cds (cd 1 belongs to *Chapter One* and contains music compositions and cd 2 belongs to *Chapter Two* and contains environmental sound), as well as a dvd with audio-visual material for installations produced as part of this project.

Introduction

The primary title of this project – *The Acoustics of the 'Self'* – inspires and reflects the thematic and organisational program of the work. As the two main words of the title suggest, the thesis possesses two components: one related to sound and the sense of hearing, and another concerned with the notion of the self. The word "acoustics" refers to and embraces sonic events, the spaces wherein they occur and the properties of the materials which generate and transmit them. In the thesis, sound is discussed in the context of its physical origin and in relation to its immediate surroundings. In the title the word "self" appears in inverted commas in order to acknowledge its complex history, and to partially open a space within which this project will attempt to understand it anew through art practice and critical theories. The use of these theories for the development of the ideas presented, which include anthropology, the cultural study of sound, literary theory and philosophy, is that of a researcher who does not claim to have received specialised training in all of these areas, but engages in their discourse as an artist approaching theory with acoustic and visual interest. Therefore, the self is not discussed as a philosophical or a psychoanalytic notion; it is not an intellectual organising schema which is brought to experience, or a concept with which the content of experience is organised. Rather in this project, first and foremost, the self is thought of as the sum of predicates assigned to its owner, and as that which makes it possible to attribute a body, traits and actions to someone. It is one's way of being involved in, or engaged with one's surrounding world. The word self is employed to indicate a person's being that distinguishes them from others. In addition, the self is considered to be the subject and object of introspection and reflexive action, which are announced in speech through the word 'I'. In light of this, voice emerges.

In speech, voice broadcasts the index pronoun 'I'; voice is the body's sonic product that proclaims the self. Moreover, when it is not reproduced through technological means, voice indicates the existence of a mouth and a body – it is the phantom projection of a corporeal presence. Thus, voice phantomizes presence at the same time as it announces and outpours the self in the form of sound.[1] But voice is invisible and malleable; it is unstable and constitutes a speaker's projection of

his/her self as the uneven flow of phonemic output. Here, the challenge becomes theoretical. What is the nature of such self and how does it relate to voice? As it resonates within the speaker and flows from him/her towards their surrounding, voice reverberates; in other words, it generates an acoustics. The study of such acoustics implicates the self, voice, the body and its surrounding. What are the relationships that emerge between them? How are they interconnected? Can one speak of an acoustics of the self, and how can such notion be conceived of? How can voice be conceptualised and theorised, and at the same time explored as pure sound, as a physical phenomenon and a material?

Moreover, if there is an interconnection between voice and the self, how does the change of the former influence the latter? During puberty the male voice changes register; it deepens as a boy enters adulthood. This is often referred to as the break of the voice. This is a unique vocal event which casts its shadow over all subsequent male vocalisations. It accompanies a change in male subjectivity, announces the passage from childhood to manhood, and the movement from one sexually allusive region into another. In his book on opera and homosexuality Wayne Koestenbaum writes:

The break between registers is the place within one voice where the split between male and female occurs. The failure to disguise the gendered break is fatal to the art of 'natural' voice production. The register line, like the colour line, the gender line, or the herero/homo line, can be crossed only if the transgressor pretends that no journey has taken place [...] By revealing the register break, a singer exposes the fault lines inside a body that pretends to be only masculine [...][2]

It becomes apparent that the break of the voice does not refer merely to a biological event that is the thickening of the male vocal cords and the change of register; it is highly charged with significance, with cultural notions of masculinity and sexual difference.[3] But, voice is sound and as such, the use of the word 'break' seems to be somewhat irregular. What does voice 'break' from? Is some sort of division a consequence of this 'break'? Or does this vocal fracture stand for a split within male subjectivity?

In order to investigate these questions the project embarks on a methodological experiment whose starting point is a 'multi-vocal' approach to writing and the simultaneous employment and equal consideration of artistic practice and theory. This decision has been made in order to explore ways in which art-practice motivates conceptual enquiry, and academic study furthers and underpins artistic experimentation. Through this the work seeks to embrace the variety of skills I have developed as an artist engaged critically with visual and sonic material, and as an academic researcher advancing my ideas through theoretical study and fieldwork. Therefore, my activity involves technical problem solving and academic study. It investigates theoretical problems, as well as questions related to the physical properties of materials, their ability to function as metaphors and as means of communication with others. As my art practice becomes increasingly concerned with the materiality and physiology of the human voice, its power to evoke someone's presence and announce his/her self, it also formulates the following question: how can voice be 'talked about' through theory and art-practice? This raises many issues with regards to the writing methodology of this practice-based project. What kind of 'authorial voice' is able to embrace both theoretical and practical concerns? In other words, how can my 'academic voice' merge with my 'voice as a visual and a sound artist'? Out of this line of enquiry emerge further questions. How can my 'creative, literary voice' coexist with my 'factual voice', and my 'English voice' with my 'Greek voice' without one of them making the others redundant? Can such issues be examined and presented through writing? How can I write in this 'broken' voice? Does such kind of writing contribute theoretically to a field that needs to be developed?

Naturally, since its early stages, this work has sought to discover a mode of writing and a format of presentation, which reflect its interdisciplinary approach and the multi-vocal method of its investigations. However, the lack of an academic model, which employs a style of writing and presentation that displays the principles at work in such kind of project, directed me towards musical paradigms.

One such example, which influenced the development of my work is *Axion Esti*, a large-scale musical composition by Mikis Theodorakis based on the homonymous poem by Odysseus Elytis completed in 1959.[4] The original poem consists of three elements: narration, hymns and chorales.[5] The content of these different modes of texts is autobiographical, mythopoetic and patriotic respectively. In his composition, Theodorakis replaces the singular voice of the poet with three different male voices: a narrator reading prose, an Orthodox cantor singing hymns and a popular singer vocalising the choral sections. The composer constructs a piece for a voice which has split itself and has multiplied. He stages a multi-vocal narrative in which voices do not address or refer to one another; each one speaks or sings its own story, alone, in monody. But it is not only the stories told by the three voices that differ from each other, it is also the histories of the voices themselves. Each one of them has its own past, its own history of cultivation and use, which has determined its individual sound and the way it is produced. The techniques of voice production heard in *Axion Esti* vary from Byzantine ecclesiastical to folk and theatrical. This adds another dimension to the work; the sound of each voice is not merely part of the poet's original voice, it also refers to a past, a tradition – either the local history and custom the author lived, or the religious and mythical beliefs and practices that were passed on to him. Similarly, the accompaniment, that is the musical environment surrounding each voice is distinctly unique. This entails 'co-operation' between different disciplines of dissimilar compositional approaches. Theodorakis's atonal modernism embraces the order of Byzantine chanting, it is interrupted by folk-sounding tunes and a hollow silence where a narrator's voice reverberates. In *Axion Esti*, the composer renounces stylistic homogenisation and the suppression of musical conflicts that this suggests. Different modes of orchestration follow one another, the textual material changes dramatically, and the three voices that sing or narrate alternate with no apparent symmetry. There is an internal coherence in the work, however, which springs from the way in which the texts and melodic themes relate to the overall subject matter of the poem, as well as from the transformations of voicing, vocalisation and instrumentation. Unexpected changes become inherent part of the overall structure. The juxtapositions of voices and styles create leaps which

invite inventive interpretation by the listener; they generate a web of associations in him/her which become the bonds that tie the contrasting elements of the composition. *Axion Esti* is an interesting example which stages a singular voice in an innovative way. By devising and employing multiple voices whose linguistic style varies from vernacular to mythopoetic, it attempts to reveal and represent the complexity and diversity within the original single voice. It allows for interconnections and relations to develop between voices and styles without compromising their individuality and independence. Each voice maintains its character and is placed within the appropriate acoustic setting. The composition demonstrates that each mode of voicing demands its own accompanying instruments, as much as it requires its own unique text. *Axion Esti* can be conceived of as an elaborate kind of musical collage, and serves as an example of a multi-vocal work which operates within different compositional disciplines.

This paradigm has influenced *The Acoustics of the 'Self'*, but further, the thesis discovers its own individual way to develop and present the complexity of its subject matter. Its components and structure mirror its interdisciplinary research. Primarily, the project is divided into two chapters. Each one describes a journey; *Chapter One* depicts a wandering quest through an enchanted forest, and *Chapter Two* traces a walk through the city. The former is an imaginary meandering and the latter an actual physical journey. Both are narrated by the same authorial voice, which however, 'splits'; it 'divides' itself into two. What is meant by 'authorial voice' is the voice presenting the main textual parts of the project; it is the voice of the author. Its 'division' refers to the two primary modes it adopts to approach and explore the subject matter. In the first chapter, it is the author's 'thinking voice' which meditates on a mythical, fantastical journey, and acquires the academic writing style and manner of a classicist. In the second chapter, it is the author's 'empirical voice'; it is autobiographical and self-reflexive, its expression becomes impassioned as it accounts and ruminates on the author's own experience of a journey. Furthermore, the space described in each chapter is different; as a result, the acoustic setting of the voice changes. In this project, an acoustic setting is defined as the sonic environment wherein something or someone is placed. In

Chapter One, the voice of the author is originally placed in the space where he writes, but is transported into the imaginary acoustic space of the forest of the myth of Narcissus and Echo. This is the site where a vocal drama between the two mythical characters of the story takes place. As will be seen, this is a location of magical reflections, echoes, dislocated voices, transformations, misplaced desire and death. To depict the acoustic qualities of such site, the textual part of *Chapter One* is accompanied by a series of 'vocal studies', which employ different compositional techniques inspired by the mythical narrative. They are dispersed throughout the first chapter. The voice that performs these studies creates various 'sonic scenes' by adopting different modes of vocalisation and voice production. Structurally, these 'vocal studies' function as preludes or interludes between sections. At the end of *Chapter One*, the author 'returns' from his imaginary and conceptual journey to his immediate surrounding, to the familiar whir of the computer fan, the tapping of the fingers on the keyboard and the ambient sounds of the interior of his home. These give way to *Chapter Two* and an authorial voice that is more informal and expressive in tone, which navigates through different concepts inspired by the various sounds heard during a walk through the city. These sounds precede each textual section and provide the acoustic setting of this chapter. In order to understand the deeper relationship between the main text and the sonic material presented in this project, we shall now introduce the overall content and methodology of the thesis more closely.

~

Chapter One studies different versions of the classical myth of Narcissus and Echo.[6] It commences with the exposition of Ovid's version of the myth. The story narrates Narcissus' journey; it describes his travel through a forest, his meeting with the nymph Echo, his encounter with his own reflection on the surface of a pond, his desire for his image and finally his descent to Hades. The destination of Narcissus' tragic journey is clearly stated at the beginning of the myth as being the acquisition of self-knowledge, which is also the condition under which Narcissus is

lead to his death. In essence, the tale of Narcissus and Echo fictionalises the emergence of the self. *Chapter One* focuses on this aspect of the Greek myth.

Myth is a narrative strategy by which humans represent and make sense of their existence; in a sense, it is a culture's story about itself. Therefore, an attentive reading of myth enables us to grasp that part of social reality that does not announce itself as such. An iconographic type, such as Narcissus, the beautiful mortal boy who falls in love with himself and rejects the love of a woman, which one might take as a straight-forwardly autoerotic and homoerotic subject, could also signify things beyond such erotic desire.[7] It would perhaps constitute an oversimplification to assume that the representation of a figure like Narcissus is inevitably cast in homoerotic terms.

Narcissus is a pubescent boy, an ephebe; his body is neither entirely masculine nor feminine – it is androgynous. Narcissus can be said to function as a figure that refuses fixity and implicates ideologies of gender. Femininity is within his not fully masculine body, but it is not visible or different; it is incorporated and repressed. In the myth, this is more explicit in Echo's vanishing. Echo is the projection and reflection of Narcissus' voice depicted as a woman. She expresses her desire for Narcissus but is rejected by him; Naricssus' aggressive response appears to contain the compensatory amount of energy spent to hold his façade of masculinity. But Echo continues to reply, to come back – she is the return of voice and the return of the repressed. The feminine comes to haunt from within and upon the male body.[8] Narcissus' reaction is a misogynistic answer to the threat of effeminacy that the incorporation of Echo within him suggests.[9] In this myth, the nymph's female voice informs us about the boy's male voice, since it is a projection of it. The voice of Echo should not be seen merely as a depiction of femininity, but as part of a model of masculinity. The feminised iconography of masculinity encountered in this myth is an articulation of male subjectivity. But what does it mean for the male subject to have two voices: a male and a female voice? In the feminine representation of Narcissus' voice, the myth testifies to the idea of an internal division within the male self. Moreover, it presents it as a pervasive

difference within it, which leads to Narcissus' death; in other words, it leads to the annihilation of the male self. Could this internalised division of Narcissus be an expression of a threat to a fictive, fragile integrity and unity of the male subject?

In the journey through an enchanted forest, presented in Ovid's version of the ancient story, the thesis discovers a representation of the search for the self and an inner quest for self-knowledge. It observes that these are placed within a context of disruptive encounters with an acoustic reflection and a mirror image. Here the thesis locates a series of ruptures – breakages that occur in the sonic and the visual realms – and focuses on the problematic and violent dis/connections between body and voice, self and its representation. First, the work examines the phonocentric imaginary evident in the myth; it studies the anthropomorphosization of voice presented through the character of the nymph Echo. It attempts to understand her presence as a vocal figure in Narcissus' scene of self-reflection, and to expand upon the foundational, yet disruptive force that voice exerts on the body and the self. It explains that the myth of Narcissus and Echo is about a lost self that is represented through a lost voice: physically and metaphorically. Voice has been ejected from the body and has lost its corporeal anchor; this voice fails to bring about the changes it seeks – it can neither establish successful communication, nor fulfil desire. The material base and the purpose of voice are lost. The story advances and draws to a close only when the body/ies that contained this voice is/are destroyed, dismembered or metamorphosed into something that escapes the realm of representation: in the myth, Narcissus' and Echo's bodies become water and air respectively. Such disastrous endings tell us about the struggle over the emergence of the self and its representation. This chapter analyses the myth's depiction of the self as an evanescent entity, best grasped at its moment of fading, and captures this by attending to the sounds of failing voices. Further, the text looks at each representation of what counts as the self, according to the rhetorical problems that rise through the language of Ovid's poem and the nature of the images it narrates. *Chapter One* tries to untangle the mystery of the myth's complex representation of voice; it discovers that this voice asks profound questions with

regard to the generation of the self and challenges authorship and linguistic meaning. This chapter demonstrates that the self is at risk when it is exposed to voice and its language.

The theorist Victoria Hamilton, who has written extensively on the myth of Narcissus and Echo, emphasises the myth's relational character. She explains that the story recounts a drama, which develops into a tragedy, in the spectrum of human relationships.[10] A pathological dyadic relationship between a mother and her son is followed by a confluent unconditional desire of a woman towards a man, and a sterile self-love that leads to death. Narcissus expresses hostility towards otherness and engages in an ultimately self-destructive and autoerotic relationship. Through these, the myth raises issues concerning sameness and problems of relating. Hamilton's aim is to create a theory of early development and to support an argument which concerns theoretical and clinical psychoanalysis. Although the above issues will be considered, in this work the myth will be approached and discussed from the point of view of an artist. The myth is employed to provide space for imaginative thinking and for associations of ideas in ways which pure academic research may not; instead, it creates a setting conducive for the development of mythopoetic writing. The aim in investigating the myth in this way is to invite the reader to look at the Greek legend and reflect upon the elaborated views in a light which escapes the frames of psychoanalysis, anthropology or literary theory, rather than to seek archetypal evidence of the ideas examined. Thus, the first chapter investigates the quest of self-knowledge through the vivid imagery of metamorphoses and echoic reverberations.

Chapter One analyses relationships of mirroring and otherness by engaging with theoretical concepts as well as with elemental metaphors and imaginative associations of materials. It engages with the natural elements (water, air, stones) and the physical and material circumstances (colour, texture, light conditions, temperature, tactility) that are encountered and described in the myth. All of these feature and are equally considered for the development of an understanding of the ancient legend. Ovid's vividly descriptive, nearly painterly language leads to an

analysis of the spatial settings depicted in the story. The chapter studies the spatiality of the myth and the distorting effects of the repeated occurrences of mirroring incidents in the story (as well as in the language and structure of Ovid's poem); it meditates on the anatomy of the characters appearing in the tale and on the architectural surroundings associated with them; it emphasises the transforming materiality of the protagonists and of the elements around them.

Further, it will be seen that the myth of Narcissus and Echo establishes a direct connection between the emergence of the self and the rupture of both aurality and visuality. Echo is the fragmented returning voice that Narcissus projects out of his body. This implies a fracture; voice is broken off, detached and ejected from the body to return to it through the ears in the form of an echo. The figure of the nymph Echo is the embodiment of a pubescent boy's breaking voice and of the phenomenon of acoustic reflection. She stands for the interrupted path of sonic waves, and for sound and language that are ruptured, fragmented, redirected and dispersed. Alongside the narration of vocal and linguistic breakage, the myth describes the distortion of Narcissus' reflected image; as his tears fall into the pond, they break the mirror image on its surface. In addition, Narcissus' desire to listen to the voice of his image signals the discontinuation of his hearing. His aural field is in crisis: interrupted, suspended. Towards the end of the story even the molecular structure of Narcissus' body undergoes a breakdown. *Chapter One* aims to discover the circumstances that cause all the above breakages, the way they appear and interrelate. It attempts to reveal their significance and consequences, and examine what emerges as a result of their occurrence. It seeks to trace the ways in which the events of Narcissus' conception, his rejection of Echo, her death, and finally his own self-love and death portray the difficulties involved in the acquisition of self-knowledge. It interrogates anew the complexity of the emergence of the self, and the problems that arise in reflection and its figural representation through sound and image. It demonstrates that these fracture and dislocate the self in the very movements that give it shape.

As has been mentioned, the first chapter employs voice for the narration and analysis of the myth of Narcissus and Echo, as well as for the creation of its acoustic setting. A series of 'vocal studies' explore various modes of voicing performed by a vocal character: a 'troubadour'. These studies utilise contrasting styles of voice production inspired by the processes of disintegration in the acoustic and the visual realms described in the myth. The 'troubadour' operates an extended vocal technique to discover points where voice 'breaks'; literally, where the vocal organ begins to fail by reaching its thresholds in terms of dynamics, pitch, register and endurance. This voice is expressive and evocative; it searches for the limitations of the performing throat and for the constraints imposed on it by anatomy, age and gender. Here, human voice is treated as a material rather than as a vessel of language or a melodic instrument. It is placed under tensile and compressive forces that expose its limits and physical properties; these forces reveal vocal breaking points at the same time that they discover new expressive potential in voice. In the short 'vocal studies', questions related to meaning have developed by concentrating primarily on technical considerations of voice production, rather than linguistic signification. Complex vocal techniques have been developed after practical experimentation and selected for their power to act as metaphors or be evocative of the subject matter I have been investigating. Further, the 'vocal studies' observe the various locations within the body where voice is produced and resonates. Emphasis is placed on sound symbolism of vocal gestures and on the associations and conflicts to which they give rise. This methodology, in which intellectual processes often proceed and direct practical experiments, creates tension between 'musical' ideas and the material employed for their implementation (voice). It raises questions on vocal virtuosity by imposing altered relationships between the vocal organ and the rest of the body. In *Chapter One*, the search for solutions to these conflicts and tensions prompts further thinking, and generates the opportunity to employ voice as the means of research and innovative expression.

An element that has retrospectively emerged through a process of echoing (by listening to the recordings of the 'vocal studies') is the way in which voice is

geographically specific. The manner in which I produce my voice, that is, by prioritising the cavities of the head and the throat over the thoracic cavity for resonance effects, has been influenced and shaped, at large, by my mother tongue – Greek. Although the complex phonological ways in which this occurred shall remain beyond the aims of this project, questions surface with regards to the recurrent slippage of the first linguistic uttering and the mother tongue. These will be discussed in the text within the context of the myth of Narcissus and Echo.

As part of the art practice of the overall project, an invented voice that belongs to an imaginary 'domestic lepidopterist' contrasts the 'troubadour's' voice. His tone is emotionless, his speech is undemonstrative, brief, formulaic and functional; this acts as a counterpoint to the expressive vocalisations of the 'troubadour'. This vocal character witnesses and observes the material deterioration caused by a domestic pest (the Common Clothes Moth), and thus the interruption of the contained and controlled domestic interior by natural forces. He searches for the transforming destructive force: the moth. The symbolism of this insect is not directly explored in the textual part of this thesis; nevertheless, the project has been informed by the popular mythical associations of moths with breath, the soul and representations (imagos). Although the character to whom this voice belongs is involved in an erratic journey whose direction is ruled merely by the accidental appearance of moths, his language is calculated and stereotyped. It pressures the self. It provides a record of the observed rupture; it documents destruction. It produces a list of a process of material breakdown and taxonomizes dissolution. Thus emerges a map of a continuously de-familiarising, changing and disappearing territory surrounding this voice. The journey through this domestic surrounding is placed in parallel with Narcissus' journey through a magical forest. The ever-altering space of the home becomes the domestic wilderness where listing transforms into an autobiographical gesture and a narration of the self. The chronological and spatial details of the sightings of domestic wildlife, and the record of the destruction of surfaces are, in essence, a personal account of activities and possessions. The record of the destruction caused by an elusive, transforming pest is a field-guide to the unobtainable and an inconclusive

mnemonic project. It is a 'diary' of the self – a record of what has been seen and ruptured; it is a list which moves both toward loss and towards a future of accumulation, recollection and of rest on prior amplitude. The voice of the 'domestic lepidopterist' operates on two primary levels. On the one hand, it indicates that this (vocal) character resigns himself to the destruction and dissolution around him, and on the other, through systematic listing, voice develops a strategy to master and cope with loss. Voice seeks to find ways in which the self reveals itself even under the 'pressure' of language. Its 'pseudoscientific' speech contrasts the elasticity of the 'troubadour's' whispers, cries and groans, and adds another register to the multi-vocality of the project. The voice of the 'domestic lepidopterist' belongs to an independent audiovisual installation but is presented here on a separate audio compact disc, which is accompanied by images. Together, the voice of the 'troubadour' and that of the 'domestic lepidopterist' compose an acoustic setting for *Chapter One* that aims to depict a personal, imaginary sonic world where the aural and the visual are in crisis.

Among the sources that have influenced the 'vocal studies' component of *Chapter One* are the works of Diamanda Galas, Meredith Monk, Björk and Cathy Berberian, as well as Patrick O'Donnell's investigations of voice and the self.

Although Galas, Monk, Bjork and Berberian reference different traditions, which span from the Greek rebetika to American minimalism, from Icelandic story telling and punk to the operatic avant-guarde, they are all pioneers in the extended vocal technique. As the academic Janet K. Halfyand defines it, the extended vocal technique incorporates a manner of vocalisation which 'extends the boundaries of [...] a normal singing technique to include [...] all the sounds the human voice is capable of making'.[11] In the oeuvres of the above artists there are groundbreaking explorations of voice as both an instrument and an eloquent expressive tool in itself. Voice is stretched to its extremes; various techniques of vocalisation interrogate and confront the physical, bodily limitations of the performer, and at the same time the acoustic results challenge the listener. For Galas, 'voice is the primary vehicle of expression' which, in combination with verbal energy, 'can be

overwhelming';[12] for Monk, voice creates soundscapes which 'unearth feelings', generate new energies and enter unexplored territories;[13] for Björk, voice 'can reach all possible places of emotions'.[14] Thus, it becomes apparent that for these artists, voice is used as a compass that leads to new and unexpected emotional destinations. Emotionality suggests interiority and a psychic life. In this light, it could be stated that the above artists employ voice as a force which initiates and directs an inner journey. *Chapter One* is aurally informed by the work of the above artists as well as other sources, and embarks on a vocal and an inner journey. My research on my own voice is placed in parallel with the analysis of Narcissus' voyage of self-knowledge and aims to enrich my theoretical enquiry into the relationship between voice and the self.

Moreover, amongst other sources, the 'vocal studies' in the first chapter have been theoretically informed by the writings of Patrick O'Donnell on voice and the self. O'Donnell's work has had a decisive influence on this project, for it attempts to understand the relation between the circumlocutions of voice and the self. Through the study of representations of voice in his book *Echo Chambers: Figuring Voice in Modern Narrative*, O'Donnell reveals how the self is inherently contradictory, conflicted and multiple. He discusses the representation of voice in five novels and finds a common denominator in the problematic relationship between voice and the body.[15] The value of O'Donnell's theoretical contribution lies in the fact that his conclusions surpass the specificities of his examples. He considers the projections of voice within cultural and political frameworks in which questions of singularity and multiplicity are complicated by the constraints of historical circumstance. As he moves from one novel to another, he draws a map of the evolution of conceptions and problematisations of the self through the study of representations of voice. Inspired by Patrick O'Donnell, the vocal experiments of *The Acoustics of the 'Self'* celebrate the polyphonic potential of a 'singular' voice and the pluralistic conceptions of the self that this entails.

The starting point of the 'vocal studies' is the fact that the very nature of voice undermines presence and singularity: voice is boundaryless, changeable,

fluctuating, impermanent, penetrating and in essence unreliable. The 'vocal studies' of *Chapter One* play with suspension of vocal continuity, the 'shattering' of voice, silencing and noise. They seek to find and demonstrate ways in which fragmentation, manipulation and multiplicity of voice can subvert and question listening practices and the usual categories by which the self is conventionalised; authority, gender and 'integrity' are placed under the 'pressure' of voice. In its majority, *Chapter One* uses voice in a monodic way: it either speaks or 'sings' on its own. However, through dramatic and abrupt changes of timbre, through its speed of transformation and alternating engagement in the production of speech and sound effects, voice creates the impression of virtual polyphony and encourages a listening out for thematic exposition and reply, harmonization and contrast. With the exposition of different voices, *Chapter One* develops the same thematic material in different 'disciplinary registers' and creates a polyphonic type of research, writing, reading and listening. The acoustic setting of this part of the project explores the materiality of voice and reveals its power to transform and evoke the presence of a complex self. Through echoing and contrapuntal relationships between the textual authorial voice, the voice of the 'troubadour' and that of the 'domestic lepidopterist', *Chapter One* explores and anticipates the emergence of a complex self. It ends with Narcissus' death, the realization of misrecognition, the discovery of deadly self-knowledge and multiple unresolved questions on the emergence of the self.

The emphasis on the relationship between aural experience, self-reflection and the emergence of the self is also proposed to offer a reading of the classical myth of Narcissus and Echo, which is beyond Freud's oculo-centric interpretation of it.[16] What are the consequences of thinking of the emergence of the self in relation to the 'forgotten' figure of Echo, to sound?[17] They must reach beyond sensual experience? And what are the gender implications of this? Moreover, the author presented in the project does not merely read or follow the steps of Narcissus – he continues the myth. The thesis employs and re-invents one of the most prominent myths of psychoanalysis and shifts the way it is understood. Also, ideas which deviate from Jacques Lacan's mirror stage emerge from the study of Echo and

self-reflection.[18] This again poses questions as to the implications of self-reflection in the aural realm. A major part of Lacan's thought, as we know it, has been passed on to us by Jacques-Alain Miller who transcribed and edited Lacan's orally delivered *Seminars* and who, as the translator of the work Dennis Porter phrased it, '*reproduce(d)* Lacan's lectures *virtually un*mediated' (my italics).[19] In this light, is not Miller's 'reproduction' of Lacan's words, his editing, his 'unmediated' mediation and the 'virtual' aspect of this act, in fact the work of Echo? What are the repercussions of such echoing? It would appear that the reason for the predominance of vision in the majority of theoretical psychoanalytic research into the formation of the self lies in the role of writing as the medium of theory. Thus, as Lacan's voice wandered freely in an overcrowded auditorium of the *Socíeté Française Psychanalyse* meditating on how we acquire knowledge of ourselves, his thoughts were being transcribed and visually inscribed in the name of psychoanalytic theory. But was this also the moment theoretical research into the formation of the self lost its 'hearing'? This thesis aims to bring it back by engaging also in art practice, and thus moving outside the terms that constrain received understandings within established theoretical disciplinary fields.

Chapter Two begins after a brief sonic introduction, which indicates that the character of the main authorial voice of the first chapter has stopped his writing activity and is about to set out on a journey in the city. His 'thinking voice' is replaced by his 'empirical voice'. The acoustic setting no longer depicts magical reflections and troublesome encounters; the surrounding sounds are ambient, familiar and appear ordinary. However, the author decides to begin a walk in which he wanders in the city letting himself be guided by sound. He is equipped with a recording device to collect the sounds of his walk, and engages in a kind of listening and thinking that are informed and 'agitated' by his findings in the myth of Narcissus and Echo of the first chapter. In this urban meandering, the second chapter discovers a narcissean journey;[20] the character embarks on a walk, which turns out to be a journey of reflection. He walks through the urban setting and in its complex, unstable acoustical field, he begins to meditate on his listening experience. He immerses himself in the noisy background; he hears and reflects.

In these reflections he locates a rupture, a disconnection between his aural and visual experience in which he finds interiority. These make up the textual part of *Chapter Two*. In the pool of sounds and noise in the city that is the acoustic setting of this chapter, the author discerns an auditory 'reflective pond' where he contemplates his relationship with sound and his ontological connection with it.

As in the preceding chapter, this is not an ordinary journey. It has no pre-determined course and sound influences the direction of travel. But what does it mean to travel by ear? What is it to follow sound? The moment a sound wave reaches each ear depends on the direction in which the wave is moving, on its volume, on each ear's unique topology, as well as the acoustics of the space in which the sound wave is generated, transmitted and received. Our brains have the ability to perceive minute differences between the arrival times of a sound wave in each eardrum, to analyze and compute them. By processing interaural and dynamic clues, we localise sounds and acquire important information on the material properties, dimensions and nature of the spaces which contain them and which our bodies inhabit. These, in combination with visual clues and our perception of gravity through skin, muscle and joint pressure receptors assist in our spatial orientation. However, if we consider the elusive, invisible and transient nature of sound, it seems almost paradoxical that it should function as an orientation device. Sound is impermanent and always travels away from its origin, it flows and transforms, it changes direction and becomes distorted as it passes through different mediums. In addition, different materials may produce similar sonic events. We are misled by sound – it is unreliable; we misidentify it – sound is a stranger. However, we trust it; we communicate through sound; while we speak, it directs us conceptually. Furthermore, we are intrigued and become emotionally affected by sound, at the same time that we may be deceived or disoriented by it. In its very nature, sound appears to be contradictory; it assists in orientation while facilitating disorientation. And our ears are 'outgoing and naïve': they are open to sound even when it is destructive and damages our hearing. Therefore, to travel by ear is to be open to disorientation, to unexpected encounters and to risk. To be driven spatially by sound may incorporate visiting unknown territories. Similarly,

to be guided conceptually by it may involve investigating the shores of the unknown.

Chapter Two expands the methodological experiment of the first chapter by employing sound as a structuring device. The development of its textual part follows the order of the sonic events in the author's walk through the city. The main headings that appear in the text reflect this. From the fist section (entitled 'Creak') to the last ('I-Escoucha!') the author moves from the domestic interior, through his creaking home door to the noisy centre of the city where he hears incomprehensible words rising out of the ambient noise of the crowd.

In light of this, the second chapter is best described as otobiographical, that is, as a biography generated by the 'oto', the ear.[21] It is a document of sounds heard and places visited, but also of ideas and associations triggered by sound; it is an otogenic diary of the self. Apart from being a record of the author's physical urban navigation, it narrates his travelling through the acoustic setting of the city and at the same time, the conceptual journey this inspires. But, what is the nature of a theoretical enquiry sparked off and guided by sound? As has been observed above, sound can be spatially orienting but equally, it can mislead, disorient and affect one emotionally. This part of the project takes this on board; mishearing, sonic interference, interruptions, chains of apparent etymological relations between words, homophonies, sensory and visual associations generated by sonic events, which however do not coincide with the material origin of the sounds themselves, comprise the methods the text develops to understand the complexity of the self and its relation to sound and the body. In effect, *Chapter Two* does not only attempt to think through sound, it seeks to conceive of a way of thinking about the self through sound. It employs sound as a conceptual compass, which initially guarantees continuity between sonic events and the development of ideas, but produces unpredictable theoretical bifurcations and departures. The ambition of this chapter, like the one preceding it, is to evoke associations that are not generated merely by the pieces of information discussed, but which surpass these due to the way sounds, facts, observations and mythopoetic material are

juxtaposed. The structure of the text is characterised by a non-consequential, transformative quality, an apparent irrationality and emotional affect of sound, as well as by a strict causality, a systematic, intellectually informed organisation and taxonomical capacity of academic writing.

Amongst other sources, this part of the project has been informed by the cultural-anthropological writings on sound and the city by Jean-Paul Thibaud and Caroline Bassett. Both theorists study the sonic composition of the city and the relationship of urban inhabitants with their aural surrounding. They meditate on the impact of contemporary technologies on our everyday listening practices, and observe a disconnection between our visual and aural experience in the city. By focusing on the use of the personal stereo, Thibaud questions the link between the physical journey through the city and the dweller's 'secret' act of listening enabled by the walkman.[22] He emphasises our ability to overlay and co-ordinate visual information with sonic experiences that are foreign to the surrounding they may accompany. A consequence of this is a kind of incoherence: a body placed in the city may receive visual clues that confirm its actual locality, however, the information received through the ears place the body elsewhere, in a sonic environment that contradicts its surrounding spatial setting. He detects a rupture of continuity between the aural and the visual realms, and locates it in the body as a disturbance in the human sensorium. Caroline Bassett expands this by considering the way mobile telephony enables one to 'reach out' and be 'reached'; in other words, the way in which a device that creates remote listening interactions allows one to be in two places at the same time.[23] She considers the effect that this has on our experience of the immediate physical and visual realm, and finds that what is present becomes consumed by the 'far away'.[24] What is seen is not necessarily closely attended to, it begins to matter less as attention is invested in the auditory space opened through the telephone. Here, Bassett speaks of a kind of break, a division, a rupture within us, as we become a 'patchwork of dis-connected states';[25] we are here and there. The author of *Chapter Two* attempts to further and develop the above observations by focusing on and investing in these ruptures. He allows thoughts and associations triggered by his aural experiences

to unravel, grow, lengthen and multiply. Thus, as he sets out and navigates the city, sound causes him to drift away; he switches his attention into his reverie, he reflects and becomes detached from his immediate visual surrounding. As he moves through sounds, he observes that he performs a distracted kind of walking during which he leaves part of himself behind and re-unites with it; he shifts away from and back to himself. In *Chapter Two*, the author searches for ways to understand how he operates these moves; he seeks to find who he is in this fractured position, within and across his state of reverie, between the sounds of the city and those of his thoughts.

In parallel with this physical and sonic journey in the city, which unfolds through a series of acoustic events (the creaking of the door, a bang in the street, the crackle of the telephone and a word shouted by a passer-by), there emerges a journey through a highly visual realm populated with mythical characters. This is the realm of the author's imagination, a world of mythopoetic associations which appears throughout the second chapter and is preoccupied with metamorphic myths. As in the preceding chapter, myth provides space for imaginative thinking and ways into philosophical meditations. In *Chapter Two*, the project juxtaposes violent mythical incidents and the urban everyday, poetic imaginary events and banal encounters. In the tale of Aphrodite's birth out of the sea, the author imagines a loud sonic event and finds a representation of the generative powers of noise. Through the etymological link between 'noise' and 'sea', he begins to meditate on the elemental relations between the human body and noise, and reflects upon humans' ontological connection with sound. A series of audible electromagnetic interruptions leads his thoughts to the nature of the urban soundscape where he discovers a 'porous' sonic realm. In this aural setting, he considers the contemporary pedestrian and finds that he/she is no longer entirely embedded in their immediate locality; to some extent they are 'absent'. What are the consequences of this partially 'absenting' kind of presence? In search for an answer, the author uncovers a series of transformations: a 'dematerialising' city and a diversified perspective of experience. He also observes that while shifting from a visible physical presence to radio waves and a dislocated disembodied

voice, the city pedestrian and mobile-interlocutor transforms as he/she uses the telephone – he/she converts into sound, into messages and interference. Here, myths of Hecate and Hermes assist his thinking; they throw light on the nature of the contemporary ambler's presence. Moreover, the wandering author realises that a new kind of continuity is drawn between the city and the ear, the external surrounding and the interior of the individual, and begins to question his own presence; he self-reflects.

The last section of this chapter expands upon this act of self-reflection. Initially, the author is immersed in the noise of a crowd but soon begins to drift off; the events narrated take place in the fictional duration of only a few seconds that is the period of the author's state of distraction. The chapter draws to a close after he is abruptly grounded back into the city by a loud cry. His reverie begins when he attempts to decipher and find coherence amongst the disparate fragments of voices in the street. At this point he notices a familiar sound: his own humming voice. He observes that while he hums away, his walk does not remain merely functional, it becomes expressive; as he moves through the city, he exteriorises his feelings and at the same time moves from confinement to self-exposure. In his humming, the author finds an aural drifting which coordinates his urban navigation and his vocal search; humming invites him to cross the line from his journey through the city to an exploration of his self. He notices that when he hums, he launches forth in an inward direction, in the region of an interior space where he delineates and presents himself – where his self *comes about*.

In this state of self-reflection, the author revisits the myth of Aphrodite's birth and in it discovers a drama of representation. He interrogates the myth's depiction of rupture and fragmentation in relation to representation and uncovers an inherent link between them. He examines the representational power of his own voice, and remarks that it is 'broken' and calls attention to schisms within himself; voice narrates a 'different self' which he can neither see, nor understand, for it resists representation. Through his humming, the author begins to hear a problematics of an acoustics of the self. He conceives of himself as an echoic chamber that

reaches no final singular harmonisation. He anticipates the disclosure of an altering, transforming self that sometimes vibrates cacophonously and sometimes harmonically.

Chapter Two draws a parallel with the preceding chapter. As in the imaginary author's study of the myth of Narcissus and Echo, here too, emphasis is placed upon sound; as a consequence, the relationship between image and sound is re-negotiated. Furthermore, like Narcissus, the meandering author embarks on a journey during which he experiences unexpected and extraordinary sonic and visual encounters, finds himself lost in the sound of his voice and withdraws to aural self-reflection. The thesis puts this forward as an originary moment in the constitution of the self and presents it as a pivotal idea for the definition of otobiography. At the end, it becomes apparent that the second chapter is in fact a reflection, an echo of the first chapter.

~

The decision to employ sound as an intellectual compass and a physical material for this research opens up a wealth of possibilities with regards to the structural organisation of the thesis. Furthermore, it implicates formatting considerations and presentation decisions that are an inseparable aspect of the project. What is the actual physical form of the thesis? How can it embrace the work's multi-vocal nature and assist in communicating its complex questions? These, in combination with the obligation to create an object that is functional and follows institutional regulations have led to the decision to produce an audio book. The audio book consists of a series of audio compact discs, which contain the *Introduction*, *Chapter One*, *Chapter Two* and the *Conclusion* of the thesis. The text is narrated by different readers and is recorded in locations that reflect the locations described in the text. Voices read, report or sing; musical instruments, computers and environmental sounds perform. Throughout *Chapter One*, the voice of the 'troubadour' introduces, interrupts, describes or contrasts the narration with various 'vocal studies'. *Chapter Two* introduces environmental sound recorded in

the city; this sound sparks off the conceptual discussion of each section of the chapter.

Additionally, the project exists in a written format with endnotes and a bibliography. Illustrations appear throughout the text and relate to mythical anatomical transformations. This form of presentation (the book) is accompanied by two cds - one containing the sound compositions performed by the voice of the 'troubadour', and another containing the environmental sound of *Chapter Two*. Furthermore, a dvd contains the reports of the 'domestic lepidopterist' and two short films *(The Shape of Breath* and *ΠAPAΣITA: Sightings of Domestic Wildlife)* all of which were produced as part of this project and are part of an audiovisual installation.

The creation of the audio format of the thesis involves a direct use of sound; this connects the project materially to the concerns that brought it to life conceptually. The breaking of the male voice is the basis of my theoretical adventure but also the touchstone of my practice. Voice is explored as a 'fabric' – it is cut, pasted, collaged. The use of different voices makes the multi-vocality of the work explicit. Voices are used to create sonic interconnections between passages or to amplify their differences. Thus, structural and speculative relationships between various textual parts are clarified or created through the use of sound. Furthermore, voices 'animate' the text. They emphasise its dramatic and poetic dimensions; they bring to written language their individual timbre, their evocative and transformative qualities. While we listen to the narration, we do not only listen to the exposition of different ideas, we also imagine different individuals. The sound of each voice evokes a person, a self. Voice also brings with it its own past, its history of origin, use and cultivation, and the complexities that these suggest. Therefore, the different voices presenting this thesis through narration and song create a stratum of aural associations that overlay the theoretical concerns of the work. In this project, solutions to conceptual questions may be found in the actual use of sound. In other words, the relationship between sound and text, practice and theory is that of interdependence. They are placed in parallel and treated as

thematic echoes or as counterpoints. It is only through listening that the web of associations embedded within each voice becomes apparent. A major influence on my casting decisions for the audio recording of this project has been my multidisciplinary training, as well as my bilingualism, which I seek to reference through the use of different actors' voices. Some of the questions that this thesis seeks to examine can be answered only aurally. What is to think in two languages but write in one? How can I negotiate a relationship between knowledge that I am able to verbalise only in English with memories and intellectual associations I have in Greek? How can this be communicated sonically?

The audio format of the thesis is also close to the way this text was produced, that is by reading and voicing to and out of myself. This is also the manner in which all textual material that informs this project has been read. In reading to and out of ourselves, we participate in the production of a text and posit a voice in it. However, this exposes us to incoherence, for the vocal organ voices a received text, it speaks someone else's speech.[26] This 'conspires' in a kind of disconnection between what is being said and the person that speaks. When the voice is involved in quoting, in re-voicing someone else's speech, is part of the self to whom the voice belongs silenced, suppressed?

Also, through my training as an artist, I have acquired practical skills and have developed aural and visual methods to communicate my ideas. How can these be employed and explored in this predominantly written project? Throughout the work, my attempt to theorise sonic matters generates a kind of writing which reveals a strong co-dependence between sound and image. It has been discussed above that *Chapter One* investigates the relationship between the aural and the visual through the study of the myth of Narcissus and Echo. *Chapter Two* develops this further by inventing a visually associative and vividly descriptive language to understand and unravel the elusive mysteries of sound. In turn, sonic material is used for its power to create visual associations, which are enlightening but equally can be misleading. The aim of *The Acoustics of the 'Self'* is not to prioritise the aural over the visual. Perhaps the poetic 'voice' of Michel Leiris can be

appropriated here and used to express more accurately what this work seeks to celebrate: 'points irradiating forces [...] whose hidden presence poses another problem that is not unimportant', for to 'succeed in drawing them from secrecy' brings to life 'a panorama whose most distant backgrounds [...] are indispensable because [...] however incomprehensible they remain they are what gives the whole its living depth' – 'these suppressed images onto which hidden connections are grafted generate this sort of margin of the unknown'.[27]

~

Chapter One

He nearly fell when he stumbled on a book lying on the floor. There are always mounts of books in different parts of his study. They are thematically arranged and keep changing over time; they acquire more books or completely disperse, become larger or smaller, some disappear and some transform. Books that he considers mostly related to what he is investigating or writing about are always amassed in a pile nearest to his desk; slowly, they became mixed with other books, and over time, the pile changes in theme, size and shape. Sometimes, it might even manifest itself in exactly the same order in a different part of the room. On the right

side of his desk, he currently has a pile of multilingual dictionaries and thesauruses, and books on human, insect and bat anatomy; to the left lie books on world mythology. He places all his books neatly on top of one another with their spines facing in the same direction. The different colours of the spines resemble geological strata of a section cut out of the ground. The terrain of his room, with the constant formation and erosion of mounts of books reflects the evolution of his thoughts, which transform its topography as if they were the forces of change that cause one subterranean stratum to give way to another and are the subject of geological speculation. The book he accidentally stumbled on must have fallen from one of the little mounts; he picks it up and brings it to his desk; it is a book with a collection of Greek and Roman myths. He opens page sixty-one and as he begins to read, the room around him falls away.

The Myth of Echo and Narcissus

Among the array of ancient myths and stories that Ovid assembled in his poem Metamorphoses, there is the tale of Narcissus and Echo, which begins with praise for blind oracle Tiresias and his abilities to give faultless prophesies. The first who tried to test the truth of his foretelling was Liriope, a blue water nymph once embraced and ravished by the sinuous river-god Cephisus; the child of the two water deities was a boy called Narcissus who, even in his cradle, received love from everyone. Liriope wished to know what lay ahead of her son and asked Tiresias if Narcissus would live to a ripe old age. The seer's reply "If he shall himself not know" for a long time seemed nothing but empty words;[28] however, it concealed the strange love that afflicted the boy and the nature of his death.

When he reached the age of sixteen, Narcissus was desired by both men and women but had stubborn pride and rejected all his admirers. One day he went hunting in a forest and was observed by a 'strange-voiced' girl called Echo;[29] she was a nymph who spoke immediately after someone else by repeating the voice she had heard. The loss of Echo's power to initiate speech was Hera's punishment. The goddess had been enraged when she discovered that Echo's endless flow of talk distracted her while her husband Zeus was committing adultery with the nymphs.

'"Your tongue", she said, "with which you tricked me, now its power shall lose, your voice avail but for the briefest use".'[30]

When Echo saw Narcissus, she fell in love with him and followed him in the woods. She waited for him to speak, so that she could have the chance to repeat after him. When Narcissus realised that he had strayed from his companions, he shouted:

"Anyone here?"
"Here", Echo answered, which surprised Narcissus, since no one was in sight.
"Come this way!"
"This way!"
"Why run away?"
"Why run away?"
"Join me here!"
"Join me here!" repeated Echo and rushed from her hiding place to embrace Narcissus.
Yet he shook her off:
"Keep your arms from me! Be off! I'll die before I yield to you."
"I yield to you" replied Echo.[31]

Shamed and rejected, Echo withdrew to the caves. Her body shrivelled and dried, and her bones transformed into stones. Eventually only her voice remained hiding in the woods.

Narcissus mocked in this way many nymphs and young men until one rejected youth prayed to goddess Nemesis who approved the righteous prayer:

"So may *he* love – and never win his love!"[32]

One day Narcissus came upon a spring, clear as silver and undisturbed by animals and vegetation. He sought to quench his thirst, but another thirst grew in him when he saw his reflection in the water. He lay on the bank like a marble statue and gazed at the twin stars that were his eyes, his god-like hair, his ivory neck and white complexion. He desired the reflection and was himself the object of his own desire, kindling the flame with which he burnt. He tried to embrace and kiss the floating figure but each time tried to clasp it, his arms sank in the water.

When I stretch my arms to you, you stretch your arms to me [...] and when I weep, I've often seen your tears [...] your sweet lips appear to move in speech, though to my ears your answers cannot reach. Oh I am he!"[33]

Grief overwhelmed Narcissus. His tears rippled the pool, he tore his robe and beat his chest. His skin became like summer grapes of various colours and melted like wax before a flame. Slowly he dissolved and descended to Hades. The nymph Echo grieved with him even in the Underworld where he gazed at his image in the river Styx.

When the pyre was being prepared, his body was nowhere to be found. Instead of his corpse a flower with white petals around a golden centre was found next to the pond where he had been gazing at his image.

~

The Mythical Forest

The events that Ovid narrates in the myth of Narcissus and Echo are set in a forest, in 'green byways'.[34] This is the site where the young boy embarks on a journey, in which he encounters a strange nymph who repeats his words, he experiences a doomed love for his image, and is lead to a strange kind of madness. This is the place where Tiresias' prophesy

that Narcissus will not die 'If he shall himself not know' is validated.[35] The forest is where the myth places Narcissus' troubled quest for self-knowledge. But essentially, a forest is a physical site, and as such, questions concerning its geology, location and morphology arise. The forest in which the adventures of Narcissus and Echo take place is characterised and can be defined in terms of its materiality, location and geomorphology. In addition, as a site described in Ovid's literary text, the forest is charged with poetic meaning. Here, at the forest is where the attempt to understand Narcissus' journey for self-knowledge begins.

The forest where Narcissus wanders provides the setting for an acoustic drama for a voice and its echo, for Narcissus and the nymph Echo. This starts when the question "Anyone here?" resounds and evolves into a 'dialogue' between a voice and its reflection.[36] Once the protagonists – voice and echo – resound and converse, the forest appears to possess a new kind of spatiality. It is not any type of forest, but one with special acoustics – a site where voicing, listening and echoing can take place. Voicing implies exteriority (it is to speak out), whereas listening entails interiority (it is to receive sounds into one's ears), both of which are prerequisites to interlocution. The mythical forest where the events unfold is a complex acoustic chamber. It acts as an auricle which receives and validates Tiresias' oracle; it is a setting whose primary function is to pick up and transmit sound; it is a space with orificial qualities – it provides concavity and interiority for echoing; it is where voice is received and absorbed. In addition, it is the stage where drama and storytelling take place. Narcissus embarks on a journey of self-knowledge in a forest that emerges as an elaborate structure, which functions as an acoustical orifice and an ancient amphitheatre (a gigantic ear in the landscape) with which it has in common the appeal to the sense of hearing and the sensitive acoustics. The comparison of the mythical forest with the ear and the fact that Narcissus' adventure commences with an acoustic event (his encounter with Echo) not only establish a connection between his wandering quest of self-knowledge and aurality, but also assert the primacy of hearing for the search for and emergence of the self.[37] Narcissus' journey is inseparable from hearing; he enters a realm of introspection through the sounds perceived with his ears. The mythical forest gives access to a reflective environment of meditation and speculation. It is the orificial device which leads Narcissus to a realm of reflection and (as it will be seen) enables him to find a 'mistaken' interiority.[38]

The association of the forest, that is a physical site, with aurality and auditory anatomy intimates an understanding of hearing and speaking in terms of geology, and leads one to think of Narcissus' wandering quest in the woods in acoustical as well as in geological terms.[39] In the myth, sound travels between cavities: the mouth, the ear and the dark caves where Echo lives. In this light, and following the above proposition that encourages a geological consideration of hearing, it becomes apparent that hearing is associated with a subterranean realm; it is a sense linked with the deep country of grottoes and caves whose hollowness renders them resonating drums – hearing is tied with the kingdom of Hades. But as a sense functioning in the living organism, it is inseparable from the realm of life. Hearing is of the living and the sense of the dead; it is a liminal sense. This is apparent even in the physiology of dying. Hearing is the last sense to cease; it clings onto life when all other senses stop functioning: the sense of hearing belongs both to life and to death. The forest where Narcissus wanders is a site of hearing, and it, too, is where life and death co-exist; they are not opposite terms, confuting or denying one another. This is evident in the fact that in the forest Echo can still exist with no body and thus hold an ambiguous ontological status; she is alive, responsive, vocal, yet bodiless, immaterial. Equally, Narcissus' image becomes 'alive', an unresponsive crying lover and the sole object of the youth's desire that leads him to his death, yet it is lifeless. The mythical forest is where the limits of existence are encountered, and life and death overlap.

In the forest, Narcissus and Echo become the two terminals between which language travels back and forth. Each one of Narcissus' projected words spits a thread which always brings back its acoustic imago: Echo. She is his vocal reflection that eternally follows him and returns to him as if attached with an invisible string – perhaps with Ariadne's mythical yarn that was solely spun to assist in a return.[40] Consequently, in the middle of the mythical forest and between Narcissus and Echo, a suspended acoustic fabric is woven, which expands and increases in density as strings of language knot and interlace with their echoes. This acoustic fabric functions as the mediating material which enables Narcissus and Echo to communicate. However, once Narcissus spurns Echo, he fails to listen to her again. This act is equivalent to the condition of being deaf; Narcissus can no longer hear his own voice; he

even strives to listen to the words of his beloved in the water but he cannot. His rejection of Echo is an act of self-harm; Narcissus severs his hearing, he tears his own tympana. From then on, the nymph begins to dissolve, until she transfigures into an ethereal being that resides in caves and hovers from the realm of the living to the realm of the dead. Amidst the mythical forest Narcissus' voice travels from him to the caves and back, from light to darkness to light. The sonic fabric that is woven by the strings of his words and their echoes appears as the quivering margin between the dead and the living. But it seems that once the thin tympanic membrane in torn, another membrane-like surface appears in the forest. After Narcissus rejects his voice and becomes deaf, he grows thirsty and encounters his image as he bends to drink water. There, a thin aqueous surface projects light in the shape of his face and enchants him. It is the stretched liquid mirror of the pond – perhaps a pond which belongs to and has an elemental affinity with Hermes, the god of the reflective element of mercury, of deception and trickery. The surface of the pond is another kind of membrane which ripples and vibrates each time Narcissus' tears strike upon it. This distorts his reflection and discloses a secret fragility; it presents Narcissus with a floating image and exposes him to its ephemerality and insubstantiality, which he finds unbearable.

At the pool, the forest satisfies Narcissus' bodily drives; it offers him water to quench his thirst. On the same element (water) it also presents the image that leads him to know himself:

"Oh I am he! Oh, now I *know* for sure."[41] (my italics)

Therefore, the acquisition of self-knowledge is presented as being as vital as that of the fulfilment of primary bodily needs. In fact, the forest assists in establishing equivalence between biological existence and psychic internality by providing a primary material motivation for the body, which also leads to self-knowledge. The moment the forest fulfils Narcissus' need for water, it also sends back to him his mirror image and thus leads him to 'know' himself. At this point the forest operates on a bi-fold level: a biological and a re-presentational. In providing water, the forest not only provides a link between thirst and self-knowledge, it also creates a correlation between the acquisition of self-knowledge and self-

reflection, as well as between liquidity and the self – it attaches the quality of fluidity to the self, it assists the liquefaction of the self. Therefore, as the tympanic membrane of Narcissus' ear that initially receives his vocal reflection transforms into an aqueous membrane which receives his formal reflection, we witness Narcissus moving from an acoustic realm where he bathes in sound, into a silent ocular realm where his self is immersed in water – thus, the forest changes from an acoustic, echoic chamber to an optical realm.

The material quality and status of the forest itself are challenged in the myth. Initially, Narcissus' vocal projection operates as sonar, as a system of echolocation. In vocalising, Narcissus generates and emits sounds which spread three-dimensionally, strike the objects that surround him, and are reflected in echoes with altered sonic qualities. The time-lapse between his vocal emission and the reception of its reflection, as well as the sonic nature of his echo yield information concerning the presence, distance, size, shape and texture of objects around him.[42] These are the usual qualities that we perceive when our ears detect the behaviour of sound in their surrounding; in this way, our ears give us an acoustic sense of a place. Therefore, by projecting his voice and receiving his echoes, Narcissus formulates a sonic image of his immediate environment. His voice and echo function as a mechanism of acoustic orientation, almost as a system of echolocation. Thus, the rejection of his echo signifies Narcissus' partial detachment from his environment. By interrupting and discarding his echo, he limits his perception of his surroundings. To have no echo, no reverberation is to be in an insubstantial space that has no matter to reflect one's voice. In this light, the forest acquires an ambiguous status; it has uncertain dimensions and possesses an impossible immateriality. This immaterial nature of the forest reflects the quality of Narcissus' self. Initially, his self is contained in his body, and his body contained in the forest; the wilderness of the leafy woods is a backdrop, external to Narcissus. However, once he projects his voice and image out of his body, the acoustic and spectral projections of his self are ejected out of his corporeal margins into the forest. Narcissus 'loses' his self. As he vocalises and reflects, his self also becomes un-contained. As it will be examined, his self is abandoned.[43] It is literally discharged from his body and deprived of its physical anchor. Therefore, a new schema emerges in which the forest is the container of the self. In this new

order of inverted interiority, that which initially was inside the body (the self) becomes external, not merely rendering the forest the site of the abandonment of the self, but also assigning it the role of a psychic metaphor.

The connection between the forest and the psyche is further supported when the subterranean terminus of Narcissus' adventure is taken into consideration. The disaster of Narcissus' quest leads him to Hades, that is, an infinite, visually un-symbolised space of darkness that opens up within the forest. Shade and darkness are first encountered in the description of the location of the pool, where the brilliance of the Mediterranean sun is interrupted by vegetation. This suggests that there is enough light to perceive shapes and contours, but not so much that the luminosity of the surfaces would prevent the eye from penetrating beyond them. In such light conditions, an observer is able to reach beyond the surface and enter into a realm that lies hidden from the light of day, far beyond the reach of earthly vision. This is the kind of vision that Narcissus acquires by the pool; he sees into another world. The pond of the forest becomes a gate to this other world, to the Underworld. But the pond is also a gate into his self. Narcissus looks at the pond looking at him; he stares at his own eyes staring at him and sees his self. Through this vision he is lead to his death – through his eyes, through the pond. Why? It will be discussed later. But going into the forest, descending to Hades is travelling into the body. The ancient Greek notion of the sòma-sèma, in which the body is considered a tomb, establishes an analogy between the Underworld and the interior of the body.[44] The subterranean realm is parallel to the sub-dermal body interior. Narcissus' journey in the forest is a metaphor of a journey into the body, into an inner world, into a psyche. This is where he enters with the aid of his eyes, through the magical pond, and where he eventually encloses himself – even in Hades he is trapped by his own self. The forest provides the opening through which he sinks into the body and de-merges in an inner realm. Travelling in the forest and into the Underworld suggests submersion within the self and self-imprisonment assured by the eternal gaze upon and immobilisation before the self.

Once Narcissus' self is projected in the forest, it does not remain coherent, singular and whole; it is also diffused, dispersed and multiplied in the echoes of Narcissus' voice and

image. First, the forest gives birth to the mimetic semblance of Narcissus' language (Echo) and sends it back to him to deceive him into believing the otherness of his own voice. Then, it produces Narcissus' visual reflection, which is sent to him as an other, and engages him in a cycle of unfulfilled desire. In his mirror image, Narcissus faces his exact (inverted) similitude. This acoustic and precise visual echoing can be seen as a form of mimicry. Some insects have evolved into extremely sophisticated 'machines' of mimicry. Usually harmless or palatable species resemble closely a venomous or unpalatable model in order to deceive a predator.[45] In examples of organisms whose predators navigate with echolocation, mimicry is also employed as a form of protection. Some noctuid moths have developed tympal organs to perceive echolocation signals emitted by bats, and produce trains of clicks through muscular tension applied near the hearing organ.[46] These clicks resemble the echoes of tongue-clicks produced by bats. This acoustic mimicry jams a bat-call used for echolocation, disorients and simulates the presence of another bat.[47] In the case of Narcissus, whose echoes function as sonar directing his journey through the forest, the reception of his echo exactly resembling his voice disorients him. It literally dislocates him by displacing his voice from its corporeal origin, his body; his echo creates the impression that his voice comes from a different direction, from another body remotely placed. It is this displacement and multi-directionality of his voice that simulates the presence of another vocal origin, of an other (Echo). In addition, the accurate mirror image reflected back to him is mistaken for an other (for a lover). The vocal and optical reflections deceive Narcissus into believing that he is not alone. The closeness of his image and its unattainability frustrate him, whereas its distortion and fragmentation devastate him. Thus, the wood is a place of illusory, perplexing happenings; it is the reflective realm which copies, fragments, reverses, mutates and returns the self. The forest appears not as a secure place of calm, clarity and comfort, but as a magical space of mirrors, an elusive labyrinthine structure of ambiguity, deception and disorientation.

The mirroring pool is where Narcissus encounters his image, is enchanted and immobilised by it; he believes it has a life of its own, falls in love with it and becomes entrapped in a perpetuated desire. This is the punishment devised by the goddess Nemesis and received by Narcissus for rejecting the love of his admirers and mocking Echo. In this manner, an

ethical dimension is introduced into the story; Narcissus is held responsible for repudiating love and for Echo's death. By supplying the means for Narcissus' self-reflection the wood becomes his punisher. The forest presents the site (the pool) and the mechanism (mirroring) for his punishment; it actively participates in establishing justice. Although the wilderness is a natural setting free from human structures of hierarchy, in the myth of Narcissus and Echo, it is a setting of ambiguous ontological structures, ordered by the will of the gods; it is the force of propriety that shares moral affinities with divinity.[48]

This far, it has been seen that throughout the myth, the forest where Narcissus wanders acquires a multitude of forms and functions. As well as being the set for an acoustic drama, the forest is the sonorous space where the voice of Narcissus is transmitted, reflected and absorbed. It is the complex resonating chamber in which speaking and hearing take place. The wood is characterised by interiority and exteriority, which render it analogous to an elaborate and multipartite acoustic orifice. This encourages an acoustical consideration of Narcissus' journey. The sense of hearing initiates his quest in search of internality – self-knowledge – and leads him to the limits of his existence where life and death interweave. In addition, hearing is considered in geological terms; it is associated with the subterranean world of Hades, into which the youth eventually descends. The leafy wilderness is the site where Narcissus deposits the phantom projection of his self out of his body and comes face to face with it. The forest becomes the place of the abandonment of his self and a psychic metaphor. Furthermore, the myth presents the wood as a perplexing, labyrinthine structure. It reflects and fragments the self. Through echoing, redirection, mirroring, multiplication and distortion, the forest renders the search for self-knowledge a multi-vocal, multi-directional, incoherent, complex and disorienting quest. In addition, the forest is a site of metamorphoses; it is itself transforming and initiates transformation. It literally acquires the face and voice of Narcissus – its water and air gain the characteristics of his visual and vocal reflections respectively. The forest becomes the self. It is also apparent in the myth that the wood is both a place of sinister happenings, where the self is tried and lost, where the rule of divine justice imposes deadly punishments, where the self perishes, as well as a place which, in its cycles of vegetation, intrinsically holds the promise of spring rebirth and the hope of resurrection. The eventual image of the narcissus flower is an emblem, not merely

of rebirth, but also of eternal regeneration and transformation. The way in which this implicates the understanding of the self will be examined. This far, it has been suggested that Narcissus' journey through the forest can be perceived as a metaphor for the emergence of the self, the search for self-knowledge and the discovery of the margins of existence. But, how might the self, self-knowledge and the margins of existence themselves be conceived of through the study of this myth?

~

Echo

In the myth told by Ovid, the nymph Echo appears as the return of Narcissus' voice. Primarily, Echo is the mythical representation of the phenomenon of echoing sound: Narcissus speaks, and she is heard speaking after him returning 'the voice she's heard'.[49] Moreover, as Narcissus speaks, he projects his voice out of his body, out of himself, and thus ruptures the link between his body and his voice. Echo can be seen as the embodiment of the pubescent boy's voice: Narcissus vocalises, and the sounds he produces come back to him from Echo. She is a prosopopoeia of his voice; she provides the 'prosopon', the face, the figure by which Narcissus' voice presents itself in the myth.[50] Narcissus initiates speech to express himself; then, if through his speech, through his voice he expresses himself, it is through Echo, the embodiment of his voice, that his self reveals itself. Therefore, an investigation into the qualities of Echo is also an inquiry into the troubled nature of Narcissus, and an attempt to unravel some of the mysteries of his deadly quest for self-knowledge.

The Geomorphology of a Nymph

The nymph Echo is a personification of the homonymous acoustical phenomenon: she repeats sounds. According to myth, she inhabits terrestrial caves. These connect her elementally to air and to earth; she is voice that is transmitted through air and a figure tied to

specific geomorphology. However, both associations render her presentation obscure. As voice, Echo's body is insubstantial and invisible; it illustrates the unseen, sonic part of language. Echo's body is breath sculpted in the shape of words, and as such, it is destined to disperse in the air. At the same time, as an Oread – a nymph of the mountains – she is directly associated with regions and spaces that provide distant reflective and concave surfaces from where fragments of sounds are returned and repeated.[51] The fact that in the myth Echo lives in caves seems to be directly associated with the observation of the behaviour of sound in specific spatial conditions; echoes are generated in concave spaces. Concavity is the spatial quality associated with the origin of the phenomenon of echoing sound. On the other hand, Echo herself is tied to concavity: she is present but strangely 'empty', 'hollow', with no words of her own to fill her mouth, since she is unable to initiate speech. In this light, concavity becomes the architectural approximation of the mythical nymph. Echo embodies a problematic representation; she is a vocal presence that is airy and invisible, mysterious and shady lurking in cavernous dwellings.

Moreover, in her meeting with Hera, the nymph is first witnessed 'talking too much'. She generates linguistic excess that ensures the continuation of the speech act. However, there is no account of the content of her words. Meaning is undermined and speech verges on insignificance.[52] Echo's language begins to resemble her place of residence, the caves; it becomes hollow – a mass of signifiers with no signified; it is deprived of its semantic power, it is mere linguistic waste.[53] Then, Echo is condemned to compulsive, repetition of language. This is a punishment that is accompanied by linguistic fragmentation and echoing, and followed by the nymph's figural dissemblage. Eventually Echo perishes in caves, withdraws and withers away; like her words that become bare and empty of meaning, her bones are stripped of flesh, they become exposed and in time they petrify.

In the story of Narcissus and Echo, voice becomes the vessel of speech that is issued forth from the mouth and enters the ear, both of which are distinguished by orificiality. This establishes a further association of Echo, the mythical representation of voice, with concavity. Her echoing is a form of transference both from a geological cavity (Echo's cave) to an anatomical one (Narcissus' ear), and from one bodily orifice (the mouth) to another

(the ear). The hollow spaces which Echo occupies are interchangeable. In the mythical narrative, this is extended to a different level when Echo repeats the cries of Narcissus' sisters lamenting his death. Then, she occupies the emotional hollowness Narcissus' death leaves behind. Echo's body replaces the physical emptiness of the lost beloved and becomes the resonance within which the lament is echoed.

In Greco-Roman tradition, Echo's inconspicuous character is accompanied by images of insubstantiality.[54] Often depicted with a pair of white wings, Echo is a *vocis imago* (an image of voice) that belongs to the domain of bliss and possesses the ethereal qualities of the dynamics of flight. Her body flies with viewless wings; it slams against rocks and mountain-tops until it scatters away beyond physical coherence. Echo is ungraspable, impermanent, and placed in a uranian context. These qualities enhance her already elusive nature as a nymph, which literally means 'bride' and denotes veiling, concealment and shrouded presentation. In modern Hebrew 'bat kol' stands for 'echo' and descends from the same rabbinic phrase meaning 'daughter of voice' which refers to a secondary, or derivative voice of the holy spirit.[55] Sometimes represented as light or by the symbol of the dove, and more often disembodied uttering a scriptural text, 'bat kol', as it were an echo of the heavens, is an unequivocal means of communication between God and his people.[56] It offers an elusive *vocis imago*, an image of voice that is essentially physically and formally un-symbolised. The 'bat kol', the echo acts, not unlike the Olympian god Hermes, as an intermediary between the divine and humans, and emerges from the inner side of the dome of the celestial sphere: the sky's blue cave.[57]

Further to the nymph's connection with the celestial, Echo also marks the return to life. Echoes are born after an original voice, when the projection of this voice comes in contact with and is reflected by matter. The nymph's voice is a re-voicing. She is expired breath which re-sounds; Echo marks a rebirth. In ancient Greece, breath was associated with intuition and the soul. According to Platonic cosmogony, human souls descended from stars, upon birth they entered the body in the form of the first breath, and departed from it at the moment of death to return gravitationally free to the heavens. Therefore, breath (the soul) was considered to be immortal and part of the celestial sphere.[58] In this light, Echo, being

the embodiment of Narcissus' echoed voice and the prosopopoeia of the acoustic phenomenon of the reflection and return of an expired sound, is not merely a sonic/vocal return, she personifies metempsychosis. For Plato the entire cosmos breathed in order, harmony and proportion. Echo's airy body, made of breath that originates in the sky, is a fragment of eternity, a reflection of celestial harmony upon earth. This connection of Echo with harmony and the cosmos is directly established in a fable found among the Homeric Hymns, which precede chronologically Ovid's telling of the story of Narcissus and Echo.[59] In this fable, Pan's evening music and piping are accompanied by the soprano voices of the nymphs and Echo's melodious reflected sound. The young Oread had been taught to sing and play all the wind instruments by the Muses. She was also distinguished for her chastity, for she fled from all males, mortals or gods. Pan was enchanted and mystified by Echo, but her celibate inapproachability and masterful music aggravated him. Thus, he sent madness among shepherds who tore the nymph apart and flung her body all over the earth. Her scattered limbs possessed the everlasting decree and skills of the Muses and continued to breathe out a sound. This version of the myth of Echo describes her musical affinity with Pan, who was the creator of the syrinx and the sevenfold planetary music; it establishes her association with the divine, with chaste purity and celestial harmony.[60] Similar qualities are also indicated by Echo's relation with the Muses who were the providers of inspiration and patrons of the arts. After her dismemberment, her musical limbs clearly demonstrate that her art and harmony surpass the limits of her physical existence and advance on eternity. The sounding of her voice upon earth is an act of mediation between the heavens and humans; it is the dissemination of heavenly harmony. Her invisible body is breath, a mouthful of sky traversing between the earthly and the heavenly, between mortals and infinity. In this liminal existence, Echo is a uranian intermediary that hovers below and above the horizon, between the depths of the earth and the depths of the sky, permeating into the realm of the dead and the life of mortals.[61]

Ecstasy

In Homer's hymn, Echo is torn to pieces and dispersed in a frenzy sent by Pan. This god, whose name means 'all', pervaded everything and was accompanied, amongst others, by

Satyrs, Maenads and the Centaurs to form the retinue of Dionysus – the god of wine, fertility and rapturous delight. Pan inhabited a domain of ecstasy – a state that could be achieved through Dionysian festivities, orgies and rituals. The etymology of the word 'ecstasy', literally meaning 'to put out of place', indicates Pan's association with distancing, transportation and dislocation. Here, taking into consideration Echo's association with Pan, it seems to be of value to examine her within the context of the above literal etymological perspective of ecstasy. Distance is a prerequisite to Echo's existence, for she primarily represents a phenomenon whose occurrence relies on the physical distance between a sound source and a reflective surface. In addition, in acoustical terminology, that which distinguishes echoes from other sonic phenomena is temporal distance between the original sound and its return; the reflected sound reaches the listening ear at least one-fifteenth of a second after the original sound.[62] Dislocation is apparent in the fact that echoes are sound waves that have been projected, transported, reflected, redirected and subsequently displaced from their original sound source. These characteristics are also evident in echoed speech. Speech is a sonic projection from the mouth. As such (excluding its transmission by technological means) speech suggests the existence of a mouth, a face, a body; speech reveals a bodily presence and marks the appearance of a speaker in the form and flow of language. However, the echo of speech is not a direct epiphany, an appearance. It is a simulation of a presence, for it merely *implies* the existence of an originating mouth, and only *suggests* someone's presence.[63] The echo of one's speech evokes a presence and invokes someone away from their corporeal origin, the body. This is precisely what Echo represents: a self removed from its physical anchor. Her arrival is the arrival of someone who has been projected and disembodied, it is the coming about of someone who has been 'put out of place' – a self that is outside its base, a self that is in displacement.

~

Sound Phenomena

If one were to trace the metamorphoses and fortune of Echo's body in both the Ovidian account and the Homeric version of the myth, there appear the commonly shared elements

of progressive physical disintegration, scattering and dissolution. In Ovid's poem the nymph demonstrates physical symptoms of withering and dehydration – her body shrivels and dries – as well as symptoms of photophobia, apparent in her choice of dark, cavernous dwellings. Similarly, in Homer's hymn, Echo's original somatic integrity and cohesion are compromised; she is torn to pieces and dispersed around the earth. These are signs of gradual anatomical disorganisation, disfiguration, dissemblage and dissemination. If we look closer at some sonic phenomena, and keep in mind that Echo is a *vocis imago*, it appears that some of the above, associated with the nymph's somatic incoherence, are in fact representations of the nature of sound. The acoustic phenomenon of echo, with its successive decaying dynamics, is a demonstration of entropic principles (that is the movement of a system with an original hierarchy toward an increasing and irreversible disorder). If in a system an amount of energy in the form of sound (that is kinetic energy of molecules) moves in a specific direction and finds obstacles on its path, thereupon, it becomes redirected and scattered, until the system reaches equilibrium, all energy is distributed equally within it and sound decays to silence. In this context, it can be suggested that Echo's mythical bodily changes demonstrate figuratively the entropic nature of the phenomenon she personifies. Her physical disarrangements represent stages of transience and progressive sonic decay. These are metamorphic qualities that are embraced by the etymological meaning of the word 'entropy', which derives from the Greek 'en-trope', literally meaning 'in transformation'.[64] Echo's metamorphoses and evanescence are embodied manifestations of entropy. The morphing of the nymph is a figural symbolisation of entropic distortions and changes in the expiring echo of voice.

In the Latin version of the myth, Echo finally transforms from a young nymph into voice and stones. This interrupts the causality of the narrated events, by suspending the process of Echo's progressive bodily weakening, and thus overwhelming our expectation of her death, her physical vanishing and terminal silence. Although this final state of Echo seems to be an interruption of her deteriorating state, it appears to speak of the phenomenology of sound. It recalls the ability of sound to change dramatically and move in many directions, depending on the space within which it resonates. Like Echo's body, sound moves, transforms and multiplies with singular ease and great flexibility. In addition, the nymph's final transformation

into voice (sound) and stones (matter) brings to mind the way in which echoes are born: they occur when sound comes in contact with matter and is reflected by it. Here, the myth discontinues entropy, avoids natural dissolution, which would entail death, and introduces a metamorphosis. In this way, the process of decay is suspended and death is surpassed. Instead of an entropic homogeneous conclusion, death, disappearance and silence, Echo's physical disintegration culminates in a transformation. At the point of her death, Echo returns to a point of origin, to voice and stones, sound and matter, the contact of which causes all echoes. Her death is a return to her birth, to the elements which cause sound reflection; Echo's end is essentially a new beginning – the point of her vanishing is a point of emergence. The myth returns to the ingredients needed for the production of echoes and thus arrives at a duality: voice and stones, air and matter, breath and earth, and thus the heavens and the earth. All these are related binary oppositions that are both the origin and the end of Echo, and reveal the nature of her manifold existence. She is both human, displaying signs of pain, disfiguration, deterioration and mortality, as well as divine, and therefore capable of surpassing physical existence and the ontological limits between life and death. Echo represents simultaneously death and eternity, the earthly and the celestial, darkness and light, the material and the ethereal.[65]

Petrification / Virginity

In this dualistic context, Echo's transformation into stones can be considered to be either a sign of sterility and therefore a sign of physical imperfection, or paradoxically, an emblem of perfection. Echo's connection with caves and her petrification firmly establish her relation with the terrestrial. Her earthliness and mortality are further emphasised by tenebrosity, and the mythical association of caves with the realm of the dark and the Gates of the Underworld. Partly, Echo is physically mortal; she experiences desire and the suffering of unrequited love, which are figuratively manifested in her bodily dematerialisation and progressive dissolution. Her eventual skeletal petrification implies a body which has been altered: her fleshy tissue has disappeared and the molecular structure of her bones has undergone changes. The transformation into stone is a barren image that indicates sterility, for it suggests lack of sufficient hydration for life to emerge. Echo is like the caves, the gates

to the dead; she is hollow. She is like stones: dry and sterile, incapable of bearing life – her womb is a tomb. Echo's chastity can be considered in a bi-fold way; on the one hand, it is a physical manifestation of dissent from creation of life through sexual intercourse; this life is mortal and thus bound to perish and disappear. On the other hand, her chastity is a signifier of immaculacy. Echo's petrification points to an un-penetrated purity; it suggests asceticism, impollution and absence of corporeal gratification – Echo is fundamentally forever virginal, aeiparthenos. Her virginity is a condition of bodily completeness that renders her a merited mortal representative of the heavens.

Echolalia

Echo interferes in the relationship between Hera and Zeus. She assists Zeus in committing adultery by engaging Hera in conversation in order to distract her attention away from her husband. Echo uses language as a mechanism to conceal Zeus' activities. Her speech becomes the new context that shifts the original focus of attention; Echo's voice is the distracting new background against which Zeus' affairs are placed and become 'invisible'. With this act, Echo wishes to exclude Hera from her husband's activities and include herself in the original dyad of the mythical couple. She enters into a 'relationship' with the divine 'father' (Zeus) in which the 'mother' (Hera) is disallowed.[66] Echo actively (through speech) pursues an exclusive relationship with the divine 'father'; she can also be said to identify with Hera, at least partially, through her activity (speech). Echo's act, that is motivated by her maternal identification and wish to relate to Zeus, does not empower her; it merely conveniences the divine 'father'. Hera punishes Echo by depriving her of the ability to initiate speech and renders her capable of merely repeating the last few words spoken by others. It seems that Echo is placed in a position of passivity, in which her language is wholly a derivative of someone else's language. She is 'trapped' in a cycle of echolalia. In psychology, echolalia is the repetition of the last words or phrases uttered by someone else and is mostly encountered in the early stages of speech acquisition, in childhood autism, schizophrenia and other psychiatric disorders.[67] Echoing in autism can be immediate or delayed; phrases and words are used in an inflexible, repetitive and stereotyped way, and speech follows the inflection of the original speaker.[68] Unlike psychasthaenic children, for

whom meaningless echolalia rarely ceases, healthy children evolve. Once attention to meaning takes precedence over the automatic response to a stimulus, echoing is inhibited. At a later stage adult utterances are repeated with the omission of incomprehensible parts and the appropriate grammatical alterations which also denote the beginning of acquiring a sense of self. These observations in relation to echolalia throw light onto the discussion of the mythical character of Echo. The commencing of the nymph's verbal echoing establishes a setting that can be related to the echolalic stages of speech acquisition. However, the nymph does not progress further and away from this state; her echolalia persists even after the end of her physical, embodied existence. Echo is 'trapped' in a cycle of verbal repetition; her voice is a reflection of her object of affection, Narcissus. The nymph assumes the role of a vocal mirror. This act of mirroring is perpetuated and enters a pathological realm when it is perpetuated by becoming a standard in her pursuit and establishment of relationships. Echo represents a condition in which language is never 'possessed' by her; the reflexive pronouns and the self that her utterances contain are never truly of her own self.[69]

Echo's mirroring and inability to initiate speech place her in a position of passivity, but it could also be argued that this condition and her ability to emulate sounds empower her. In the echoing of Narcissus' words, Echo reveals herself through a 'pestilent', 'parasitic' act; she exists as a sound *because* of and *through* another's voice. In essence, she can be considered to be a kind of 'parasite' and Narcissus to be her 'host'.[70] Echo 'lives' of someone else's vocal emissions: of Narcissus' breath and language. However, her existence subsists at the expense of that within her, which is silenced and suppressed. Ovid states clearly that the nymph echoes back 'the voice she's heard'.[71] This implies that each echoing produced by her is accompanied by the manipulation of her body; one can imagine the emulation of Narcissus' words and voice demanding the reconfiguration and re-modelling of Echo's oral cavity and laryngeal structure. She literally undergoes a process of internal re-organisation, which represses her morphological difference in order to mimic another's voice. Echo is voice, but paradoxically, she exists by being deprived of her own, original voice and language; herself is concealed and dormant beneath the duplication of another's voice. Vocal mirroring dictates Echo's continuous bodily shift and reshaping, and leaves nothing tangibly constant onto which to anchor herself.

~

The text of the myth demonstrates how a play of repetition and difference among signifiers can be turned into a character. The attachment of a name to a set of signifiers constructs a character. Once a series of sentences within the text is attributed to Narcissus, he becomes crystallised as a vocal self, as someone whom we are not merely told about by the descriptive part of the narrative, but who initiates speech, who utters sentences. On the other hand, the narrative constructs Echo as a speaking self by repeating Narcissus' sentences. Thanks to an elaborate manipulation, the repetition of Narcissus' words becomes answers and a request; Echo appears to request his love 'using' his words. In order for this to occur, Echo is endowed with a selective power which is employed by her to sometimes repeat the entire sentence and sometimes an eclectic mix of it.[72] This reveals a double concern for Narcissus' uttered sentences. Through prosopopoeia – the personification of voice marked with the name Echo and an echolalic condition – the text of the myth refuses to invest in the words voiced by Narcissus a singular meaning. Echo appears upon the repetition of 'Join me here!';[73] she leaves the woods, where she had been hiding during the entire 'dialogue' between Narcissus and his echo, and presents herself. Upon her apparition, she reveals both her body and the distance between her and Narcissus; she brings to visibility her physical difference, separateness and otherness. Thus, the myth here offers a body to the alterity in Narcissus' own speech. Echo is the corporeal figure that embodies Narcissus' voice and stands for the diffraction of signifiers in his language. This is mostly demonstrated at the point when the 'dialogue' between Narcissus and Echo culminates in a devastating misunderstanding. Narcissus' statement 'Join me here!' is replied by Echo's identical uttering, which is accompanied by her embrace.[74] Narcissus then abruptly rejects her, which makes apparent his intention to say 'let us meet' and not 'let us unite' physically, 'let us copulate', that seem to be closer to Echo's intention.[75] The point at which the demand of a meeting begins to signify a different demand (that of physical or sexual union) marks an entanglement of meanings and intentions. But there has not been a distortion of an original intended meaning, for such 'true' meaning of the utterance cannot be decided upon. The echo is not a distortion that affects the intended meaning of the statement initially uttered; it

denotes the impossibility of determining a single stable meaning, and thus, the impossibility of connecting a statement to a singular intention of a speaking self.

What is radical here is not the nymph's capacity to alter utterances or make them differ from themselves. For this to be possible, there would have to be an original stable intended meaning. Echo points to a kind of 'sliding' of signification, to linguistic diffraction and a potentiality of alternative meanings. Reading a vocal echo as an answer radically unsettles the understanding of an answer. Echo sends back Narcissus' question as other, and thus no *one* true signified can be attached to his question; she answers by noting and exposing the otherness within his question. Like her residence (the caves), her reply contains cryptic, cavernous pockets, where meaning becomes uncertain. At the same time, Narcissus' hearing of his vocal echo as an answer does not merely unsettle the understanding of an answer, it also subverts any sense of unity, coherence and stability Narcissus may have about himself. When Echo appears and speaks, she dispossesses Narcissus' voice of the speaking 'I' that originally contained it. He believes that the voice he hears after he speaks is an answer that proceeds from another self; he does not recognise part of himself in his vocal projection to the dramatic extent of becoming engaged in a 'dialogue' with it. Here Narcissus discovers an unrecognisable otherness in himself; what takes place in the 'dialogue' between Narcissus and Echo is a continuous unveiling of the otherness within Narcissus' self. The myth reveals this otherness within him by displacing it; by positioning it outside of him; by offering a name to it: Echo;[76] by giving it a desire: to re-unite with Narcissus. And such union would indeed be a re-union, for the voice Narcissus hears as other is his own voice, projected, displaced, dispossessed and re-embodied.

In Echo, Ovid's narrative explicitly constitutes the feminine as an other, who can only speak by altering language as it is delivered by a male original self. Nevertheless, this feminine other should not be seen merely as a derivative, a secondary entity, for it is primarily revealed through its othering, that is, her operation of alterity. In order for the other, for Echo to remain an other in relation to Narcissus, she must maintain her qualities, and these are not to be found in her speech; Echo's otherness does not lie in her language, for this derives directly from Narcissus' speech. Her otherness is the endless altering activity she discovers

within language; Echo is less of an entity and more of an othering operation. This initiates an endless linguistic drift; it moves language to latitudes of diffracted, potential meanings.[77] The potentiality of alternative meanings in language does not only unsettle the notion of an original, reliable, stable, intended meaning, but also questions the integrity and coherence of a speaking self. Narcissus never recognises his own speech. This failure is disconcerting, since such recognition is the distinctive characteristic of a speaking self. Ovid's text deprives Narcissus of the privileged position of such self. The diffracting potentiality and multiplicity of alternative meanings in Narcissus' language release it from the control of a single self and shake his singularity. Echo uncovers and exposes the incoherence and otherness within him – she destabilises the narcissean harmony of his self-enclosure and isolation; this is the reason her presence poses a threat and is violently rejected by him. It is precisely this alternativeness in the language spoken by Narcissus that reveals an inherent otherness within himself. As soon as he vocalises, there unfolds a multiplicity, that is, a diversity of signifiers which denies a single intention of a unified self.

The call 'Anyone here?' is a paradoxical question, which, in its very uttering and 'reply', dispossesses the 'I' that is calling.[78] The response to the question 'Anyone here?' in fact inhabits the question. One can imagine the following answer: 'There is one, I Narcissus, the one who has just uttered a question, here'. But Echo answers and automatically alters the question, rendering uncertain the very presence of the caller. It is no longer certain that there is someone. As soon as 'I' asks, it renders its own presence uncertain; as soon as 'I' begins to perceive its own voice as an other that replies, it multiplies itself, it becomes estranged from itself, but also absents itself, for the 'I' that replies is no longer the 'I' that verbalised the question. Like the typographical dash (-), that is the ellipsis, the absence preceding an individual's speech in a text and the mute punctuation mark that indicates the arrival of a presence, 'I' becomes the figure that stands for one's presence and at the same time is posited in place of a lost self.

Narcissus does not see in Echo the embodiment of a language which is his own. He severs that which he cannot behold – the otherness in his language; he disconnects it from his self and projects it onto an other, as if it belonged to her self. In disconnecting part of his

language from him, he 'kills' part of the self that produced it. Through this act, Narcissus commits a murder. He dispossesses part of what constitutes his 'I' by eradicating the profusion and alternativeness of what 'I' is. Here, Narcissus' phrase 'I'll die before I yield to you' demonstrates the vulnerability of the singular subject, by transforming the linguistic alterity to which it is exposed (Echo) into a 'deadly' danger.[79] In addition, his uttering 'I'll die before I yield to you' seems to be paradoxical, for there has already been a death – the end of the abundance of the 'I'.[80]

~

Narcissus

Pride

Narcissus rejects his admirers and remains physically and emotionally untouched by them; his reaction towards Echo who 'dares' touch him is violent: he pushes her away and verbally harasses her. Desire is never consummated – it is suspended. In order to account for Narcissus' refusal to reciprocate Echo's and other admirers' love, the myth invokes the notion of pride.[81] Pride discontinues and frustrates the circuit of sexuality by positioning the object of desire (Narcissus) out of reach. Thus, pride causes an interruption between desire and its physical manifestation in touching and sexual union. The expression of pride in the myth is not only to be understood as Narcissus' desire to remain untouched and untouchable by an other, not worthy of his own beauty, for initially Narcissus is not aware of his own beauty, since he sees himself for the first time at a later stage in the story.[82] It would be more accurate to state that his pride is not based on an acknowledged self-image – it is his desire to be undesired. To be desired and give in to an other's desire would entail his becoming another's; Narcissus deflects the approach of an other, for it would lead to the radical impoverishment of his self.

Water

Water in the myth appears to be cool and motionless. Ovid describes the pool where Narcissus lay to slake his thirst as one that is shielded from light by trees and is never approached by animals, birds or humans; in other words, no animate life surrounds it or springs out of it. Thus, the pastoral setting of the myth is a hyper-idealisation hiding an image of infertility. The perfect silvery reflection of the world in the pond, the serene natural standstill and the peace indicated by the lack of movement, animal or human presence reflect the sterile encounter between Echo and Narcissus. In addition, the descriptive image of the pond with its protective natural 'shield' against 'the warming sun' recalls the conditions of a shady cave;[83] the water of the pond is a fluid that is placed within a concavity, away from warmth and daylight. After the encounter between the nymph and the boy, water acquires a primary role: Narcissus experiences a strange thirst, whereas Echo becomes moistureless – she dries up, she literally dehydrates. These seem to be the consequences of a series of rejections: Echo's embrace is expelled, her body is dismissed, and thenceforth water becomes dislocated. Water is always outside the body; it is not contained within Echo who dries up or the body of Narcissus who thirsts. By nature, water is life-giving, it is a fertile fluid, but here, it is displaced and does not generate life. Water becomes the ectopic fluid both Narcissus and Echo lack, and the ectrotic fluid of their brief union. It is the fertilising liquid that never leads to fruition, like Narcissus' seminal fluid, which never flows from him into fallow unfertilised Echo to consummate their relationship.

To thirst is to lack; it is to be missing water that was part of oneself.[84] There is an exactness in the desire of an organism for water, that is the molecular compound that constitutes seventy five per cent of the body's mass. To thirst for water implies 'biological mirroring' – it is to desire one's own missing elementally identical part. Thus, thirst becomes synonymous with Narcissus' own mirroring on the surface of the pond and desire for himself; the quenching of his thirst would be a union with that which he lacks and would offer him wholeness – it would be the fulfilment of his thirst and of his desire.

Narcissus' thirst transforms into desire, into an endless quest for an un-attainable self-image that is a beloved, Narcissus and the pond. Then, his thirst is really for otherness, self-knowledge, and nothing, the depths of the pond – all of these at the same time. Therefore, it

is not surprising that Narcissus is bound to fail;[85] the demand of love, into which his thirst metamorphoses, is an unfulfillable demand. It requires the determination of a single object of love, but Narcissus provides himself with a multiform image to love. It is an image whose unattainable closeness painfully frustrates his senses; it is untouchable and suspends the fulfilment of his desire.

The Prayer

It is significant that Ovid places a prayer in the narrative after the 'disappearance' of Echo and the rejection and mocking of many admirers. This is when a youth appears and prays for justice. A prayer is a solemn request with an aim to surpass human dimensions; it is a call of metaphysical dimensions – an impossible call that, in the myth, resolves the perpetual cycle of unfulfilled desire and enables a mortal to communicate with a god. As the myth implicitly reads it, the dimensions of Narcissus' unresponsiveness and its criminality are so vast that can only be answered by a divinity called in prayer.

When Tiresias states that Narcissus will not die 'If he shall himself not know', he preserves the possibility of an escape; Narcissus can escape a premature death if he manages to avoid self-knowledge. In order to lead Narcissus to self-knowledge and to his death, the narrative must therefore provide a convincing reason for and cause of it. Narcissus' unresponsiveness is used by the narrative to condemn him to an unavoidable death – a deadly self-knowledge. The story of Echo is inserted between Tiresias' statement and Narcissus' death to function as the wheel for criminal unresponsiveness. Echo stands for all the unanswered lovers of Narcissus. Here, the myth presents itself as a narrative about responsibility – one that is close to the etymological meaning of the word, that is 'respondere', to respond.[86] It presents the response to the other as a duty.

The Punishment of an Impossible Response

The narrative situates the scene of punishment of Narcissus' 'misbehaviour' at the mirroring pool. This is the site where a rejected youth's prayer to Nemesis is answered, and the stage

for Narcissus' punishment on behalf of Echo, the anonymous youth and all the unanswered lovers. The 'death sentence' that Narcissus receives for his unresponsiveness, through Nemesis' divine intervention, reveals the 'vital' responsibility to respond to an other's desire. The myth 'finds' Narcissus 'guilty' of unresponsiveness and imposes a penalty that mirrors exactly the crime: this time, it is Narcissus that remains unfulfilled and unanswered by his beloved.[87] It is worth noting here that even the act that calls for Narcissus' punishment is characterised by mirroring. A prayer is an act signified by a gesture of mirroring: one hand meets its symmetrical counterpart. In the myth it is a mirroring – the joining of the two hands in prayer – that calls for justice that proves to be Narcissus' death sentence. But, if the myth 'finds' Narcissus 'guilty' of unresponsiveness, does it mean that it would be possible for Narcissus to be responsive at all? Ovid's text dramatises an unresolvable contradiction: it stages a 'dialogue', which by definition suggests the possibility of interlocution and responsiveness, and at the same time subverts this possibility, for the introduction of the phenomenon of mirroring/echoing essentially questions the existence of two discrete selves. On the one hand, the designation of Narcissus' unresponsiveness as 'criminal' implies a possibility of a response. On the other hand, as it has already been discussed above, Echo's response to Narcissus' uttering 'Anyone here?' remarks an original absence, for it literally questions the existence of the original caller. It both confirms the existence of the 'I' by addressing it, and condemns it to unresponsiveness and disappearance by questioning its presence. Consequently, the myth renders Narcissus' presence uncertain. In effect it asks: 'Narcissus here?' 'Is there an original speaking presence?', 'Is there a speaking self?'. Echo obliges Narcissus to respond. He is found 'guilty' for his unresponsiveness. At the same time, Echo disposes Narcissus of his 'I'; she is his speaking self somewhere else, away from him. Thus, the 'I' is dispossessed of its own speech and found 'innocent', for it is unable to fulfil the demand for a reply. The punishment imposed by divine law introduces an ethical dimension, which, within the context of Ovid's myth, contains a paradox. Narcissus is found both 'guilty' of unresponsiveness and 'innocent', for it is impossible for him to be responsive. In order for Narcissus to respond to his echo and his echo to respond to him, he is placed in the position of being both the 'I' which rejects the other, as well as in the position of that rejected other. The possibility of responsiveness, to which the Ovidian text originally alludes by embodying an echo and creating the illusion of two discreet speaking selves (Narcissus

and Echo), is shattered, since Narcissus is to himself both an 'I' and an other. This impossibility becomes more explicit in the narrative when Narcissus' encounter with his vocal mirror (Echo) is replaced by his encounter with his mirror image. In this scene, the original 'possibility' of a response is ruined, since Narcissus' mute reflection grants any form of verbal response impossible. Therefore, the punishment imposed by Nemesis' divine law in order to bring justice imposes a condition which contains the impossibility of a reply and refers back to Narcissus' own impossible response. The punishment is 'symmetrical' to Narcissus' 'crime'; it traps him in a situation of unreciprocated love. In this way, and by introducing impossibility, the punishment does not only 'repeat' the crime, it also exposes the original impossibility of response in the encounter between Narcissus and Echo.

Narcissus' criminal unresponsiveness receives an endless punishment. The perpetuation of Narcissus' 'crime' relies on verbal repetition; what is demanded of him again and again is a response which he does not give. His punishment, on the other hand, relies on visual repetition; the shape of his figure is repeated on the surface of the water. Narcissus' punishment is the manifestation of a 'criminal desire', the love for his own image, which is infinite, for his image withholds the possibility of returning to him eternally. It comes back again and again, anew, untouchable and 'un-possessible' by him; it appears each and every time he bends towards the pond. It returns from the disfiguration and distortion that Narcissus discovers each time his tears break the water and dissolve his image – each time he whispers secrets on the skin of his aqueous lover, tears him and reaches for the depths.

The Liquefaction of the Self

Narcissus' unresponsiveness disembodies Echo; it provokes her deterioration. However, Echo is the reflection of the sound of his own voice. Thus, the rejection and consequent physical deterioration of Echo are at the same time performing Narcissus' own deterioration. The dissolution that Narcissus inflicted upon Echo is answered by his own dissolution. In the narrative of the myth, he is described as a still life composed with over-ripe summer grapes, apples, a weak flame, a melting candle and frost.[88] Here Ovid associates the quest for self-knowledge with a stage of maturity – a ripening, which paradoxically marks the emergence

of the self as well as the beginning of its decay and end. Earlier in the narrative, the dissolution of the self was suggested by the figure of Echo, the phantom vocal projection of the self, which served as an image of an acoustic vanitas bound to fade away entropically. This was followed by another image of dissolution: the blurring of Narcissus' reflection on the water. Similarly at this point, the still life is a visual vanitas that emphasises the evanescence and vulnerability of the self by introducing an image of de-materialisation in which the integrity and coherence of the body itself are questioned directly. Ovid's description draws the reader's attention to the quality of Narcissus' skin. His complexion is similar to the author's natural visual associations: discoloured, deteriorating and bruised. One can imagine it as a translucent membrane through which veins and the branching of the circulation system are visible, as if the molecular structure of Narcissus' skin becomes altered. He is penetrable, for his skin is so thin and translucent that what is underneath and inside it is visible; through his drama, Narcissus discovers a sub-dermal internality.

The borders between what lies inside and outside Narcissus become indistinguishable. In this way, a new unstable reality is created – the world is sieve-like with surfaces that appear to be in crisis. Through Ovid's elaborate description, the surface of the flesh is turned into a repertoire of signs. Deformation and decay become the external characteristics that accompany Narcissus' pride, his mis-recognition and unreciprocated love. Further to its disintegration, Narcissus' skin becomes his own prison as he expresses the wish to leave his body. He cries 'Would I might leave my body!'.[89] He surrenders to his skin – it is that which he solely sees and loves in the incorporeal reflection on the water. Here, the youth's 'crime' of unresponsiveness is answered with the punishment of his skin. In Ovid's description, Narcissus' skin may be in decay, nevertheless it is preserved and presented and therefore, the punishment itself is maintained; it is displayed on Narcissus' skin, as a reminder of the painful mortality that arrives as a consequence to the unresponsiveness toward the other, and as a result of the surrender to the flesh.

Narcissus only sees the 'phantom' of his mirrored shape. At this point, the aesthetic of his umbra echoes his epidermal translucency and vice versa. His skin is so thin, that what is contained within it is on the verge of pouring out. Narcissus swells and eventually *does* 'spill

out': he cries. Narcissus' tears blend with water and together reflect his image. Tears and water turn into the image of the self, while the self turns into tears through mourning and water through reflection. Ovid's text implicitly reads the self as fluid; it is characterised by formlessness as well as reflectivity.

Narcissus' tears are an expression of lament: he is separated from his beloved by the 'mysterious' transparency of water, and thus, mourns his un-attainability. However, the same tears of unfulfilled desire and love become the 'weapons' that provoke disfiguration, and cause the vanishing of the image with which Narcissus is enamoured.[90] His 'spillage', like a melting candle and frost, are signs of his 'unnatural death'; the tears 'murder' as well as mourn the unattainability and disappearance of the sinking/drowning beloved.

Narcissus' cries are accompanied by the tearing of his clothes. His garment is the 'cocoon' from where his body emerges; it literally echoes his body-shape and forms an additional 'skin' that is destroyed, broken and torn. This point of emergence, however, is also a sign of loss. The tearing of the robe is a gesture of mourning and grief: Narcissus laments the death of his lover. This death is signalled by the dissolution of his imago and seems to pre-enact Narcissus' own death. His love is addressed to the image of himself hovering on the surface of the depths into which he sinks 'his arms to clasp'. In this attempt, Narcissus reaches for the abyss beneath the shape that has no body and no voice – in other words, he reaches for nothing. Here, the moment of the constitution of the self is directly presented as the moment of its absencing. Narcissus acquires self-knowledge, he knows the image is he, but the 'knowledge' of himself is in fact 'knowledge' of a simulacrum. It is recognition of the self as an appearance that is in its essence missing; it is an absence – a simulacrum referring to no original.

Narcissus' reflection can be read both as the 'shape' of the self imposed upon formlessness (the liquid pool), and as an image of the fluidity of the self. It becomes evident that in drawing an ambivalent picture of the self – as both having a shape and as being formless – the mythical narrative ties Narcissus' figuration with his dis-figuration. Narcissus' reflection implies two movements: one towards form/figuration and another towards formlessness/dis-

figuration. The former occurs the very moment the image comes to appearance, whereupon Narcissus shapes himself and his lover – he literally cuts out his own form out of all the reflections on the surface of the pond and shapes the object of his desire. The latter movement towards formlessness occurs when the image, disturbed by tears, is distorted provoking Narcissus' own dis-figuration and physical undoing. This bi-fold function of the reflected image, which intimates a bifarious understanding of the self as fluid and as the shape imposed upon shapelessness, is in fact pre-signalled in the myth through the story that leads to Narcissus' conception. Narcissus was the child of the union between the blue water-nymph Liriope and the sinuous, embracing river-god Cephisus. The copulation of these two waters was violent, since Cephisus forced himself upon Liriope and thus imposed his sinuous form upon her. Liriope is an amorphous fluid which acquires the form of a cavernous vacuity, for this is the shape of her ravisher's embrace – she literally fills the hollowness invisibly drawn in space by the river-god's embracing arms. The violent imposition of a shape onto shapelessness produces an offspring (Narcissus) that is now thrusting down his own image onto the formless water. Therefore, Narcissus can be assessed as the figure that is imposed on liquidity. At the same time, his act of reflecting onto the water can also be seen as a 'pouring down', as a 'fall' towards formlessness and liquefaction. This change into a liquid state is also echoed in Narcissus' own 'spillage' (his act of crying), in which tears fall to formlessness by fusing perfectly with water – a reminder of the complete merging of the two fluids that brought Narcissus to life.

The moment the narrative assigns an image to the self is concurrent with the moment of a 'fall' – literally the fall of Narcissus' image onto the water. Therefore, the myth binds the moment of the emergence of the self with that of a 'fall'; then, a direct connection between the self and the dynamics of 'falling' is established. But what kind of 'fall' is this? Narcissus' 'fall' is primarily a temporal one: he identifies with an unspeaking image and thus sees himself in the figure of a pre-lingual self, an infant.[91] In his infantilism, Narcissus recognises the origin of the self in a mute, pre-lingual and thus pre-socialised state of the past, and therefore, he both 'falls' away from the present and falls silent.

Furthermore, the muting of Narcissus, which occurs when he identifies with the silent imago, can be seen as a delayed echo of what already took place in the story the moment he rejected the projection of his own voice (the nymph Echo), and subsequently rendered himself mute, he condemned himself to silence. Narcissus sentences himself to silence twice: through spurning the nymph and through his identification with his reflection. The recurrence of Narcissus' muteness subverts the notion of the irreversible movement from pre-lingual infancy to the speech of childhood. It refuses to define speechless infancy as a mere phase out of which the self emerges, and from which one moves away. Instead, the myth asserts that what Narcissus encounters and identifies with in the gleaming pool is not the infant that he was, but the still-living infant that part of his speaking self is. In essence, the myth does not make a violent cut between the pre-lingual and lingual self; it recognises their co-existence and the inherent muteness within the lingual self. The myth describes the emergence of the self as an enigma. At the very point where the 'I' emerges, it is reduced to a simulacrum and falls into muteness.

The silence to which Narcissus condemns himself is also a sign of his death, since he models himself in accordance to his image, which is lifeless. In essence, the very moment he emerges as a self, Narcissus 'un-makes' himself by exposing himself to the illusion of deathly similitude.[92] He may be reaching for depth, for interiority, for himself, but in fact the emptiness of the flat reflection matches his own emptiness, the lifelessness of his image matches the lifelessness within him. His birth as a self occurs at the same time as his death – his self is born dead. Yet again, echoing within the myth is encountered here, since Narcissus' stillbirth is announced by the very name that was given to him upon his birth. Narcosis, deathlike sleep and numbness are indicated by the root of the name Narcissus: narke.[93] Narcissus never begins to live; like his body and the image, he dissolves in the dissolution of the imaginary, where he is washed away losing a life he does not yet have.

The association of the moment of Narcissus's reflection and identification with the image on the water with his 'return' to a pre-lingual state of infancy encourage further discussion implicates his mother, the water-nymph Liriope.[94] The floating image on the surface of the pond 'sees' in Narcissus its own reflection, for the boy makes himself in accordance to this

floating image when he verbalises 'I am he' and not 'it (the image) is of me'.[95] By this point, however, the myth has already revealed that Narcissus is made in this image, because in reality this is the image of his mother Liriope, according to which Narcissus has been shaped. It can be seen that this is announced through the names of the characters early on in the story. The name Liriope literally means the face (-ope) of the lirion (the narcissus flower). This, in combination with Liriope's ontology as a water-nymph, suggests that the liquid face that is gazing at Narcissus is no other than the face of his aqueous mother, Liriope, the narcissus-faced one. Through this primary onomatic mirroring, which prefigures reproduction and sameness, it becomes apparent that Narcissus is himself the incarnation of his mother's visual echo – he is an embodied reflection of Liriope. The point when Narcissus identifies with his image and acquires the ambiguous existential status of an embodied reflection of Liriope, suggests that his 'fall', that is his 'pouring down', his liquefaction and elemental transformation into water, is a change towards and into the maternal body. This implies his physical unity with Liriope and thus an incestuous 'fall'. Narcissus fuses elementally with his mother's body in a merging that echoes the conceptive union between the two waters (Liriope and Cephisus) that created him. Through liquefaction, Narcissus achieves oneness and wholeness with his mother. At the same time, the thrusting of his image onto the water can be seen as an act of reproduction. Through his self-reflection, Narcissus gives the image of his face to the water, to his mother, and thus impresses his identity upon the issue of their love. With his image, his breath, his kiss, his empty clasp, his tears, he breaks the surface of the water that is the body of the water-nymph Liriope, which, like the hymen of virginity, is preordained to frangibility. Narcissus' act of reflecting is an act of procreation through which he duplicates and reproduces himself. As in the case of Echo who is inseminated by Narcissus' voice, in the reflection of his face, Narcissus impresses his self upon Liriope's liquid body, he becomes an inseminator, a 'father' capable of siring and creating genetic doubles.

The Music of His Name

The name Narcissus is made of 'narke' (which means death) and of a phonetic excess, that of the repetition of the same sound in '—cissus'. Acoustically, '—cissus' pierces the ear like

an avenging insect, like an earwig which crawls into the ear and perforates the tympanum with its gnawing pincers.[96] The deathly name Narcissus warns of the disaster that will befall the adolescent boy once a kind of hearing is terminated. But in what way is Narcissus deaf? He rejects the nymph Echo, who speaks with his own words and hopelessly repeats after him. Echo is the air Narcissus ejects from his own lungs and the voice he projects from his body, which are re-embodied in the form of the nymph and are reflected back to him. In spurning Echo, Narcissus becomes deaf to his own call and thus incapable of inner self-reflection. Narcissus fails to hear his own self – he does not hear an 'I' speaking and soon deteriorates, fades away. The name Narcissus speaks of the dissolution that comes once the 'I' is denied and silenced.

Like the excessive multiplication in '–cissus', Narcissus himself multiplies; he acquires a visual and a vocal double: a duplicate image on the surface of the pond and an echo. He is materially different from his aqueous reflection but shares the same appearance with it. Echo and Narcissus, on the other hand, are formally different but share the same voice, like the letters c and s in his name, which have two distinctly different formal identities, but whose sound is the same sibilant *sss*. In the homophonic letters c and s, in the name Narcissus, misrecognition finds a graphic form. This is precisely what happens to the young boy when he gazes at his own graphic representation, his mirror image – he misrecognises himself. 'I am he' Narcissus exclaims and models himself after his image. He stares in stillness and begins to cry, to slowly liquefy and, therefore, acquire the fluid materiality of his reflection.

Narcissus is tripled in the myth – in addition to his own appearance and corporeal body, he reproduces himself through the nymph Echo and his mirror image – like the letter s, which appears three times in his name. This is a letter of sinuousness; drawn by the hand across a blank page, the letter s curves like a snake.[97] Sss *is* the sound of snakes. Narcissus lies on the ground bitten with his image and paralysed by the poison of self-love; he slowly transforms into his sinuous liquid image – he cries, he melts, he seeps into the ground, he oozes into Hades.

The consonant before the first s in the name Narcissus is its homophonus c. The lunar c is a mute z (zi:). The teeth join for air to pass through, but in its passage from the lungs to the mouth, the exhaled breath leaves the vocal cords untouched, un-vibrated, silent and still, like Narcissus who, after he has rejected his voice and silenced himself, contemplates his reflection before the magic pond in complete stillness. The c, the mute z (zi:), is like the moon, light that has been reduced to a deficiency, a mere reflection, light that is illuminated by an indirect origin and has no warmth. Narcissus inhabits this cold nocturnal world of reflection and hallucination, an environment which designates the fantastic. He is in a forest in the middle of the day, but strangely in a realm of no dazzling light, with no human or animal presence. These indicate a world beyond the limits of the human, that which is supernatural, transgressive. This is where Narcissus wishes to be because he transgresses his own mortal nature – he identifies with his immortal image, he seeks eternity.

Searching for the source of Narcissus' transgression one must rest upon this letter, the deficient, lunar c that is half an s – this letter of mutilation and censure in the heart of his name. Narcissus is an adolescent, his voice is breaking. Echo is his voice but also the feminine within him, which, in the process of becoming a man, Narcissus ejects and dissociates from. He cuts off part of him, he 'de-feminises' himself. Self-mutilation for Narcissus is felt as a devastating necessity to escape the unbearable liminality of adolescence and enter manhood. It takes him away from in-betweeness. Narcissus slashes off that which he sees as feminine in him and experiences as a threat to his masculinity; from then on, he becomes absorbed by an image he believes is exclusively masculine – his own reflection.

At the core centre of the name Narc-i-ssus stands the letter i, just after the deficient, lunar c and before the double s. The narcissean 'I' is trapped in-between the perception of a self that is limited, that has dispossessed and disposed of otherness, and the perception of a self that is ever-multiplying, expanding, reproducing itself. The 'I' stands between two opposing worlds: one of loneliness and one in which it is never alone. In the former, there is no external or internal sexual difference; even the feminine within – Echo – has been ejected and rejected. The adolescent boy is incapable of change; he enters a deaf, self-admiring,

lonely masculinity. The latter world is one of hallucination and familiarity in which the 'I' is everywhere and solitude is populated with multiple reflections of the self.

For Narcissus, the 'eye' is the structuring core of his world.[98] It stands between his two ears (which he disregards) and with it he creates a silent visual reality with no resonance, no depth. The 'eye' cannot hear the hissing uproar – '*csss*' – in his name, and is flooded with tears. The narcissean 'I' dissolves in the noise of rippling distortions just as the letter i in his name drowns in the shrill of the c and the double s.

But the name Narcissus is not a death-sentence, it is a warning – an acoustic reminder of the dangers of misplaced desire, of the ambition for eternity and the inability to accept otherness and self-difference. Narcissus is guilty of all. The name is of a flower, which, although it is not liberated from Narcissus' tragic predicament (it keeps staring at its image on the water's surface), places Narcissus in the natural cycle of death and renewal. The homonymous flower, with its annual regeneration, suggests that death is not the end, but a stage in the transformations of the self.[99]

Clasp

Narcissus is deprived of the success of his clasping gesture. Touching and grasping his lover would introduce to him an other;[100] it would insert the outside world into his world of enclosure and isolation, and would generate in him a conception of externality. Through the achievement of a grasp, Narcissus would create links between himself and the outside, and would acquire a knowledge of his own physicality. Through grasping one becomes aware of their ability to move, of their body's strength and physical limits.[101] Touching and grasping confirm one's own physicality and give access to otherness; they allow one to create relationships with the external world. Narcissus' story presents the rupture of this, for he is deprived of the physical dimensions of a grasp. Consequently, he is unaware of his own physicality, which seems to explain his identification with an insubstantial reflected image and his pursuit of an immaterial umbra. However, Narcissus' physical limits are both non-existent and infinite. On the one hand, he experiences no successful clasp that confirms his

own corporeality, and at the same time, he creates copies of himself and thus extends his limits in the water (through his visual reflection) and the air (through his vocal reflection). The myth casts Narcissus' desire and erotic life in the status of a photocopier, a Xerox machine; he creates and longs for a copy, a clone, a mere reproduction of himself. Over and over, he reaches out for himself but misses; he subsequently feels devastated and dies. The failure of his clasp becomes a metaphor for his 'unfulfillable' desire and the endless strife to grasp himself. But it is not only Narcissus' hands that can never reach his beloved. His semblance itself and the echo of his language also suspend Narcissus' expectation of ever reaching anything. His image and echo are the points where the myth sites alterations, multiform fluidity, multiplicity and distortion, which prevent Narcissus' language from reaching his ears, his love from reaching his beloved, his aqueous image from reaching fixity.

To Not Be Able To Transform

Narcissus gazing at his reflection, gazes at a divine aspect in his image.[102] The myth describes his eyes as stars and his hair as being worthy of Dionysus and Apollo.[103] Narcissus' act of looking down at his reflection is reversed; in reality, he looks up and sees heavenly constellations and gods. It can be explained that in his godlike beauty he encounters a divinity he inherited from his mother. Ovid describes Liriope as a nymph that is blue – an epithet applicable to both water and the sky.[104] Her beauty is defined by a colour which renders the differentiation between water and the sky uncertain. When Narcissus looks at the beautiful youth reflected in the water, he sees this elemental indeterminacy; he mis-recognises the image of his eyes; he sees something that belongs to the heavens (constellations, stars, a heavenly light source) and strives to model himself in accordance to this. 'I am he!' he says. He makes himself in the image of light and creates an incorporeal 'self' that is the product of his own sight. Narcissus staring at his reflection sees the incorruptibility of his image – and his image is incorruptible because it has no corporeal body, no matter. When he looks at the image, he does not merely look at himself, he looks at a 'divine' aspect in his image, he mis-recognises himself. He sees the immortality of his image that is the eternity of appearance. The exclamation of self-recognition ('I am he!') is

an announcement of mis-recognition, and an impossible movement of himself towards eternal existence and a surpassing of death.

But the story of Narcissus does not conclude with his divination; on the contrary, the youth descends to the realm of the dead. This is when the narcissus flower appears by the pond at the place where Narcissus lay. This event is not a metamorphosis; it is a substitution. Ovid states clearly that instead of the youth's body, Narcissus' sisters found a flower.[105] The youth's body remains missing;[106] it is substituted and not changed into a flower. And this makes sense, for Narcissus is unable to metamorphose; to metamorphose is to change, to transform from one thing into another, to accept otherness and difference within oneself. But Narcissus rejects all that is other and perpetuates sameness through self-multiplication; he dies because of his inability to transform. He believes himself to be dispossessed of all otherness, to be singular and permanent. Nevertheless, throughout his journey he encounters his own otherness. First his voice and then his image. What is other about his voice? Narcissus is a pubescent boy, he is at a stage of development when he goes through a uniquely 'male' experience: his voice is breaking. What does it break from? The breaking of the voice signals sexual awakening and gender definition. It marks the loss of the physical, vocal and sexual indeterminacy that often characterises prepubescent boys and girls. The breaking of the voice announces the production of testosterone, the shaping of the male body and the loss of one's child-like or feminine features.[107] During this phase of development the voice is unstable; it uncontrollably climbs to high registers and descends to the depths of profundo. And it is this feminine, or sexually ambiguous past that Narcissus rejects when he pushes Echo, his own voice in the form of a woman, away. She is a kind of limpness in his voice that is similar to the kind of limpness of the wrist that can often 'embarrass' masculinity. He raises his voice to scorn her, but in fact his voice attacks itself.[108] What is other about Narcissus' image? His reflection is distorted each time his lips, hands or tears touch the surface of the pond; it dissolves to visual noise and forms itself again. But each time the refection appears, it appears anew; it is not the same image, it is the image of the same boy. What Narcissus sees is renewed in the way his vision is renewed each time he shuts his eyes, each time his eyelids wash and refresh his sight and eyeballs. Narcissus is devastated by this change and renewal in his image: he shouts

'Stay!'.[109] This is a cry for permanence, for sameness. This is the condition he imposes upon himself which renders him unable to change, to transform. Eventually his body is substituted by a flower – a fact which declares Narcissus himself a substitutive figure. The narcissus flower that replaces the boy is like him; it is rooted by the pond and stands immobile before its reflection. In addition, its growth is not dissimilar to that of the isolation of young boy; the narcissus flower develops in the bulb's self-enclosure and self-containment. Once Narcissus mis-identifies with the empty image, he reads himself as a figure in the place of emptiness, in the place of absence. Narcissus is like the flower; he is the figure in place of a missing self.

~

The aim of Narcissus' journey through the forest is announced at the beginning of the story by Ovid, when he states that Narcissus will die and this will confirm Tiresias' prophesy. All along we are aware of the fact that Narcissus will know himself by the end of his journey; what we do not know from the very beginning is that the myth proposes that knowledge of oneself can be acquired through reflection: vocal and visual. But why does Narcissus die when he emerges as a self? Why are his reflections lethal? Echo and the reflected image have a similar status: they are bodiless projections of Narcissus and inscriptions of himself. Narcissus becomes a projector of light and sound. His self is manifested in the shining and voicing forth. With his voice Narcissus inscribes himself acoustically on the air, and with his reflected image he signs the water. Why does Narcissus' self become nothing more than a vocal reflection in the air and a mirror image inscribed on the surface of the water? Why does the self die in the very process of inscribing itself as an acoustic and a visual imago, as sound and image? Narcissus fails to hear himself within the otherness of his reflected voice – he fails to be initiated to the 'secrets' of self-reflection. Then he encounters self-reflection again in his image in the pond. In this inverted image, the myth locates another inversion: Narcissus 'sees' himself as the image rather than the image as belonging to him. This triggers a process of removing his body off him and eventually takes his life away from him altogether. His mis-recognition suggests that he sees himself as an incorporeal, bodiless self. But, by disposing of the body, the self that has no corpus, no physical anchor, is earthly

no more. Such self is not bound by drives or biological needs. Through its inscription, the self becomes somehow 'cleansed', 'purified', but also condemned to a deadliness that comes with 'purification'. The self writes itself *out* by inscribing itself. In his failure to become initiated to the 'secrets' of representation, Narcissus identifies with his inverted image and inverts the very notion and ontology of a substantial corporeal self. He is born as a self and experiences the consequences of a disastrous act: he kills himself unknowingly – he dissolves in his very inscription. What Narcissus recognises in his reflections is an other, a beloved and himself. Otherness opens up within him; he discovers that otherness is in the self. The reason he dies is the fact that he cannot hear or see this otherness within him. In other words, he does not realise that to know himself is to accept that there is an otherness about him he does not know, that to know himself is to never have entire knowledge of himself.

If Narcissus' journey is a quest for self-knowledge, then the quest for self-knowledge can be described as a journey for a ruptured emergence; it is a discharged projection – a rupture within; a separation from otherness – a rejection of otherness within; a splintering self-reflection; a suspended recognition – an eternal mis-recognition of self-reflection; a liquefying stillness; a shattering unity – a fragmented multiplicity; a communication failure. Then to desire to obtain self-knowledge is to have a transgressive desire, to desire 'unobtainability'.

Narcissus finds it impossible to relate to his own self – to relate to it as a self and as an other self at the same time. He cannot have an experience as a present 'I' in a present, since the emergence of his self coincides with its end, its death; the very figure of the self is generated and erased at the same time. The myth narrates an event in which the first person is reduced to the impossible state of being an 'I' without a 'me', and a self without a body, a self whose self-knowledge is founded on mis-recognition. The narrative stages a relation between a self and an other, forgetting the complexity already set out by the story, through its echoing, repetition, reflection and design of the other as Echo, as an echo and an imago of the self. The myth speaks of the impossibility of the emergence of an 'I' which never really exists, and narrates an event which cannot be recalled as having ever taken place.

To Not Be Able To Hear

Through Narcissus' expectation to hear his image speak, the myth makes explicit the assumption that to see is also to be able to hear, to communicate; it voices the possibility of hearing inscription, listening to and understanding a sign. At stake is an *unexpected discontinuity* between perception and cognition, or phrased in a positive manner, the *assumption* of *continuity* between perception and cognition. Narcissus is devastated by the fact that he cannot hear his reflection speak. The silence of his image renders the reflection of light-rays, the sun itself silent and thus unintelligible. On the one hand, this can be understood within a mythical context, in which the sun and the heavens are populated with gods, as a way to express that divinity and the natural phenomena it represents are beyond human intelligibility. On the other hand, to cite the silence of light as a catastrophe emphasises the vital association of light with intelligibility that is conceived as speech carried through voice. Thinking of light as intelligible voice and meaningfulness is a way of conceiving perceptual experience (in this example, seeing) to be continuous with hearing and the understanding of speech, and thus to be continuous with language, signification and knowledge.[110] This is where Narcissus fails, for his visual perception is disconnected from his aural perception, and thus is divorced from language and signification. In this sense, the distance between sign and meaning, or in other words, the distance between perception and cognition is expressed in the myth through Narcissus' inability to hear. His image is mute and therefore unable to make itself intelligible; Narcissus cannot hear that which he sees (the mirror image of himself, his self-inscription) and therefore does not acquire knowledge of his self. Parenthetically, it should also be mentioned here that this suspension of meaning and intelligibility are also expressed in the suspension of language that Echo represents; she literally is a hovering voice, suspended speech. The myth asserts that to not be able to hear is to remove language and signification from the world; it is to be in an optical realm of insubstantial spectral surfaces with no acoustic depth or the depth of meaning, or signification. The disastrous mythical quest for self-knowledge reveals that to see is as good as being dead, if one cannot also hear the 'sense', the significance of what one sees. If

continuity between seeing and hearing collapses, if light does not carry the signification of sound, the world is rendered meaningless and the self perishes.

~

Chapter Two

He wrote these and stopped typing. The wandering journey of Narcissus lingered on in his thoughts; he put his jacket on. He is about to begin a walk through the

city. He does not have a pre-determined direction or a terminal destination; he does not plan to visit a specific place to see a particular site. Rather, like the mythical boy, he wishes to meander, to wander in the city by letting himself be guided by sounds and noises. This will not be an ordinary journey. How and where will sounds direct him? What will his route through the city be? How can he map such a journey? Equipped with a device for the sound recording of his navigation, he will walk by ear and bring back his sonic findings. Upon opening his home door, he can hear its familiar creaking noise and the muted sounds of his domestic interior – this is where his journey commences.

Creak

Acoustic Doors

The passage from one's home into the public realm is marked by the interaction with an architectural feature, the door, and presents a significant moment for the city dweller. The home door signals the transition between two spaces: the domestic and the public. Each of these contains an acoustic field in which sounds and noises are generated, reflected or muted. The domestic and the public domain are each associated with certain sonic qualities some of which are distinctly dissimilar between the two realms; the dramatically different levels of noise generated in each of these spaces is an example of their discrepant acoustic content. Upon opening the home door, noise generated and belonging

to the outdoors floods inside, and respectively domestic sounds spill out. The home door functions as an acoustic door.[111] Its opening introduces a new sonic environment to the domestic interior. This reveals sound's 'territorial' nature. Sounds generated in the exterior, penetrate the domestic space; they travel away from their place of origin. Sound is always elsewhere, removed, hovering in displacement. But sound is not merely an invisible ambience filling and travelling through spaces, it is the result of materials interacting with one another. As such, sound carries the physical characteristics of its source; the timbre of a sound (the quality which allows one to distinguish the character of different sounds) is directly associated with the acoustic properties of the materials which generate it. In addition, sound is moulded and distorted by the space within which it is produced. Therefore, as sounds pour into the home, upon the opening of the door, they bring with them information on the architecture of their origin.[112] At the threshold of the door, a new sonic field is created, which contains a multitude of sounds generated both in the interior of the home and the exterior. As these sounds are heard simultaneously, the architectural information carried by them fuses the indoors with the outdoors. On the margins of the home, while aural information of one space merges with that of another, a liminal sonic zone is produced.

In this liminal zone the city dweller experiences a spatial transition as well as a shift of a different nature. Exiting the home is an access ritual that is characterised by a habitual ordering of thresholds that enable one to adapt to the rhythm of urban activity.[113] Firstly, upon opening the home door, the city dweller alters their mode of listening: levels of noise accepted when in the public realm are mostly considered intolerably loud at home, thus, the threshold of one's noise tolerance is adjusted and modified. Furthermore, access to public space is associated with the beginning of private listening;[114] the technologies of the Walkman and the mobile telephone testify to this. The pressing of the 'play' button on the personal stereo, or the 'on' button on the mobile telephone before the home door, mark the moment the city dweller admits they have entered a public space. In these two cases, the door signals the beginning of another kind of listening experience. The city dweller is transporting his/her privacy out of the home by listening to his/her

personal stereo and completely shutting outdoor noise off, or by enabling him/herself to engage in private conversations in a virtual interactive setting created by the mobile telephone.

Although, in the realm of vision, the dimming of sight upon encountering something unpleasant would be inconceivable, in the realm of hearing, the shutting out or dulling of noise is an accepted attitude in the urban setting. The city dweller is either inured to the hectic din of the metropolis or considers noise a distraction.[115] There is an acquired sonic indifference, a flattening of aural perception, a numbing of the ears. This self-adopted deafness of the city dweller creates the fiction that what one says cannot be heard;[116] it offers the lonely liberty of assuming that no-one is listening and no-one is likely to speak – one is free to act as they please. On the other hand, it creates the impression that one is not implicated or affected by city life just because they are physically present in it. The personal stereo and the mobile telephone realise this indifference; they provide the technological means for the synthetic separation of the city dweller from their physical and social surroundings. They immerse their users in a private sound-scape and engage them in another interactive scene. Thus emerges the city as a non-shared perceptual or social space. This implies that dwellers of the same city can be potentially ever absent from it and for one another. No-one can really know where you are in a metropolis; one is virtually always present, potentially always accessible, but also, away, engaged in another interactive setting, distracted, removed.

The shutting off or disengagement from one's immediate sonic environment is not observed only when exiting the home. Paradoxically, entering the domestic realm is also associated with aural closure towards the immediate surrounding and the exterior.[117] Michael Bull's study on the Walkman and the management of everyday life discusses the use of the personal stereo within the home. Users choose to listen to their own 'personalised' sounds on their Walkman even in their domestic environment.[118] In addition, the technology of double-glazing, employed in most modern housing, functions as a sound insulator which separates the interior from the exterior with a thin stratum of vacuum. The home window gives visual access

to the exterior, but blocks noise by interrupting the medium through which most environmental sound is transmitted; it 'promises' privacy simply by silencing exterior noise, and assists a vacuous kind of looking that is deprived of acoustic depth. On the other hand, the home door seems to provide privacy by functioning as a counterpoint to the home window; the door disallows visual access to the exterior (and from the exterior to the domestic interior) but has little sound-insulating use. In fact, it is customarily used as a sounding box: the knocking on the door marks the instant an architectural feature of the home transforms into an instrument used for its percussive and reverberation properties, and signifies the moment noise acts as a message which calls for the opening of the private domestic interior towards the exterior; in other words, it is the moment a sonic interruption from the exterior is received as a signal.[119]

It is the creaking noise of my door that signals the beginning of my journey. I set out to navigate the city and make a sonic recording of my walk. I press the 'record' button and I admit I have left home; I have raised my noise-tolerance levels and have 'opened' my ears to the sounds of my surroundings. The threshold of the home door and the transition from a private to a public space are associated with a perceptual re-orientation, a shutting out of noise, but I choose to open out towards it. I adopt a navigational strategy that is not primarily based on the position of my eyes on my body but on the orientation possibilities offered to me by my ears. Since sonic phenomena are the physical result of materials interacting with each other, in listening to the city I am also 'feeling' my way through it.[120] I do not travel as a detached, disengaged observer through a city-spectacle; to travel by ear is to open to urban sounds and engage with the materiality of the city. Furthermore, to open out towards noise is to accept the shutting out of it. At the door of my home I can still see an interior that I can no longer hear. My listening out for urban noise is the muting of the leaking tap, the silencing of the humming refrigerator; it is the dampening of sounds that draw the intimate acoustic portrait of my home. I leave privacy behind and become a sound receptor, a listener. The more I shut out domestic noises, the more I can hear sounds of things I cannot see. From my aural perspective I can access things that are outside my visual standpoint. Therefore, in the liminal space of the front door I

adopt a multi-perspectival perception. Through this perspectival diversity I can approach a common public space, for it is the single, fixed point of view and a world allowed to present itself from a sole angle that abolishes the possibility for the emergence of a multiple, diverse, multi-perspectival public space.[121]

~

1. Noise is the medium through which I begin to walk. It is air, or rather, multiple vibrations, which first disturb air molecules in their immediate surrounding; these air molecules, in turn, pass on their vibrations to adjacent air molecules and generate innumerable audible frequencies all at once. My ears are the weathervanes pointing me to these vibrations: the creak of my home door, the humming flicker of the malfunctioning electrical light on my way out, the murmuring ambience of the city, the vroom of automobile engines. By the ear I hear: from auricle through tympanum to cochlea, but also skin. I am immersed in noise *because* I am immersed in air and *just as* one immerses him/herself in water. Urban noise resembles the sea in that it moves through things and everything in the city bathes in it; it is air, but it is also fluid. As in the sea, urban noise never ceases. I set out to travel in the city and I begin to drift.

This is to travel by hearing; this is the model I follow in my own journey. I am in constant motion and welcome chance meetings. Noise is the compass orienting and directing me. The ear knows how to lose track, so, I employ hearing as a navigational device and a model for thinking: always active and accepting of disorientation.

2. In order for me to remain a receiver, a listener, there is the condition that I make less noise than that transmitted by my surroundings.[122] Thus, I navigate the city (always directed by noise) with a small mouth and big ears, like a bat. This does not imply that I have no voice – bats discretely hide their voices in extreme wavelengths; I become pensive. And bats are by no means blind – they have

good eyesight, especially in the dark;[123] I slip into vivid reverie. Bats' navigation also relies on the detection and discerning of noise – noise within their messages. It is not the bats' own echoed calls, but the distortions in their signals, the transformations of their voices, or in other words, the qualitative variations within different kinds of noise that are evaluated by them, and register as belonging to different surroundings.[124] In my walk through the city, I too, listen out for noise. I am setting out to travel by ear, to reflect upon my navigational experience by exploring and investigating my aural surrounding, and like a bat I hear badly – I hear noise. It is no surprise that bats' echolocation mechanism relies on the inversion of hearing, that is, the fact that they are more attentive to noise rather than their signals; after all, bats are creatures of inversion, their up-side-down suspension is life-long. They hang in such manner because their bone structure is too fragile to support their bodies.[125] While in suspension, tensile forces and their skin prevent their brittle bones from fracturing, and hold their bodies together. In the case of my walk through the city, it is also an inversion (that of hearing) through which a sense of continuity in my experience is created; I 'undervalue' messages and listen to noise, which functions as the shared background where the disparate urban activities around me take place. Noise envelops them and my walk; like skin, it holds the building units of my journey (my footsteps and my observations) together. In noise the otherwise fragmentary and multifaceted city life is given a sense of coherence.

From my doorstep, the urban space with its constant ambient background can be considered a 'silent' space: from this position, I can focus on no *one* specific sound; all is ambient noise, all is disruption. Then, there can be no disruption, no discontinuation; neither can there be any interruption nor a clear message. Out of the complex, unstable acoustical field of the city, I recognise nothing singularly, discernibly and definitively different from myself – I immerse myself in a noisy background with no distinct otherness and begin to hear something similar to myself. Like a bat receiving its echoes, I become the receiver of my reflections upon city noise. As I hear and reflect – an interlocution unfolds. But like a bat, which in its course can never 'forehear' its own echoes, I reflect in unpredictable directions – I listen to the city and thoughts freely deviate.

3. The noise of the traffic orients me, it places me in relation to my surroundings. In this case hearing suggests openness towards the exterior. In parallel, the sound of the wind against my ears positions me in relation to my body; *'I am here, I am corporeal'*. This could have been a different journey through another city, but could it have been of a different body? I drift away in my thoughts; I become distracted. As with sound, which always travels away from its origin, I waft away from my body. This is to think by ear, to have one's thoughts scattered by the wind, to be anemone-like. The flower of Anemos, the wind, and animus, the mind or soul, opens up only when blown by the wind.[126] To be an anemone is to bloom with the wind, to let sound burst the animus open, to unfold the mind and disperse it like sepals, like seeds. It is to never become dry, for the sepals are puffed away before they fade. The same wind disseminates the seeds – thoughts transported by sound – and as with each seed there are more births and births of deaths, with each sound there are more thoughts and abandoned thoughts. There is a constant movement, a parallel motion of, or an oscillation between the noise of the city and sounds of inner thoughts – a dialogue emerges. As I set out and sometimes drift away, I perform a distracted kind of walking, which is accompanied by this complex sonic experience, and makes me aware that paying attention or failing to do so is not purely a matter of geometry, it is not simply about looking or where my gaze is directed. When I drift away I switch my attention into my reverie and leave part of myself behind, like the anemone sepals leaving the stalk. In that sense there is still some part of me to which I will return, with which I will re-unite. I begin to walk in the city and move through its sounds, away from and back to myself. But how do I operate these moves and what is it exactly that I travel through? Who am I between the sounds of the city and those of my thoughts, within and across my state of reverie? I take noise on board, it cannot disrupt me; noise is not undermined, it is not silenced. This will be a journey with no interruptions.

~

Bang!

I am walking through the familiar streets of my neighbourhood with alert ears; I have encountered everything I see around me countless times. All appears to be as it was, yet this time something seems to have changed. I pass by the veiled building site at the end of the road and hear the deafening banging noise coming from behind the veils. I must have been hearing this din for weeks. How can I have grown accustomed to such noise?

I stare into space and see her emerging, hovering above the noise. She has the name of her birth, which is as old as the rocks of the Mediterranean. I see spirals, white waves, pouring down from her head. She is the goddess who sprang out from froth when the sky fell into the ocean, when Uranus' castrated genitals dropped from the heavens into the sea: Aphrodite Anadyomene. I hear the sibilant noise of foam and the marine murmur, the aftermaths of the loud noise caused by Uranus' penis reaching the waters. Splash! This is the noise that came out of the blue, from a vertical dimension. An extraterrestrial noise – noise is a stranger. It tore the calmness of the sea and disrupted its continuous drone. This noise is the instant of insemination, impregnation and birth; it is the opening of the aquatic womb and the moment of the goddess's genesis; my auditory cavity is penetrated by noise, it becomes its anatomical receptor, the womb that receives a sonic ejaculation.

I am hearing birth, that is, the salpinx of my ear reaching out for the salpinx of the uterus. Aphrodite is not merely the offspring of castration; she is also a child of noise – she emerges in the midst of the sea which resounds with Uranus' agonising scream, the splattering of his penis disturbing the waters, and the noise of the blood-stained sea-waves frothing with spermatic fluid. Noise is Aphrodite's sonorous origin; its fertile potential surpasses the sterility of castration, produces life and transfers the gift of fertility to her. I hear noise. Noise endowed with generative powers.

~

The scientific model of cosmogony – the Big Bang – is not dissimilar to the imagined great mouth of Chaos from which, according to Greek mythology, burst out the universe. Both models describe a cosmos that derives from a sudden loud event. Their placing differs; one is located at an imperceptibly small instant before space-time, the other in a resonating cavity next to the vocal chords. However, for both science and myth, the birth of the universe is conceived as a great sonic event from which everything came into being, including all subsequent forms of

noise, sound and music, along with humans and our auditory capacity. There seems to be an inherent ontological connection between human existence and sound.

Here, the word 'sound' is used to denote any sonic event, not necessarily organised in the form of music, understood as a message or an unwanted interference, but rather as an event inclusive of any vibration that is a pitch or a sequence of pitches: the constant interstellar vibration in the universe, that thirteen-billion-year-old echo of the Bing Bang, the residue and the cesspool of our messages, the background of information, the uninterrupted perennial sonic canvas of our perception – noise.[127]

The origin of the word 'noise' can be traced back through the Latin 'nausea', the synonymous Ionic Greek 'nausia' and the Attic 'nautia', to 'naus' meaning 'ship'.[128] Through these etymological strata of the word, it first appears that noise is bound to a bodily sensation, a state of being: nausea. The inner ear (also called the labyrinth) is the chief organ of balance, equilibrium and orientation.[129] In co-ordination with the eyes, skin pressure receptors, muscle and joint sensory receptors and the central nervous system, the inner ear is responsible for the perception of the directions of motion.[130] Constant movement during nautical navigation may cause one or more of the organs that perceive movement and pressure to send conflicting messages to the central nervous system; this induces the feeling of nausea that is also caused when the inner ear is damaged or exposed to persistent loud noise. Thus, the ear – the organ responsible both for equilibrium and the sense of hearing – is where navigation, the perception of noise and nausea meet. Noise also seems to have partially inherited some of the violence of the sea. Being subjected to loud noise resembles the dangers of diving into the depths, since it threatens the fragile membrane of the tympanum with perforation, and the ear with loss of hearing. Furthermore, the etymology of the word 'noise', in its direct association with seawater, suggests its elemental connection to the human body. The sea is where life emerged; protoplasmic organisms developed and received nourishment from seawater. Their evolution to more complex organisms was accompanied by the development of circulatory

systems for the distribution of nutritious substances found in the sea, to all parts of their multi-cellular structures. These circulatory systems are the primordial past of the complex of arteries and veins of the human body. Our blood plasma running through them still resembles the basic chemical composition of seawater, and the consistency of the body (being 70% water) maintains the same elemental connection with the sea.[131] Therefore, here, in the sea, my primal home, I ought to locate and reflect upon my relationship with the most naval of things: noise.

The sea is never silent; that placid or vehement uproar seems to be established there for all eternity, together with the waves that roll back over themselves and splatter their white flames.[132] It is a continuous and unending noise: always the same and ever-changing. Noise never ceases; it is a constant murmuring. This restlessness is inherent in hearing, which is one of the first senses to develop in the foetus, and the last to disappear upon cessation. Hearing, active when our gaze is hazy and when asleep, continues while other senses are intermitted. It has no determined direction and can stretch to all points of the compass, like the sea, like noise. In hearing, multiple registers of sound coming from different directions can exist simultaneously; this creates a sense of inclusion, expansion, multi-directionality and 'embraciveness'. But like the sea, hearing also divides itself. Streams and currents flowing within the sea, always ruled by external climatic changes, split it towards many directions. Likewise, listening is directed hearing, a current within it, which splits from it, orients itself towards and focuses on a specific acoustic event. But like sea currents that obey thermodynamic laws in flowing back and forth from the warmest to the coolest parts of oceanic beds to establish equilibrium in the seas, listening flows to bring about balance and coherence in one's acoustical experience. Even to the most dedicated musical aesthete, listening is an oscillation between the stage and the seat.[133] In discussing Baudelaire's description of his listening experience at the theatre, Douglas Kahn comments that 'there is a constant state of interruption, shattering the continuity of the music'.[134] Listening is perpetually agitated and restlessly suspended between the listener and the sound source. When I listen, I feel that my hearing migrates to the sound source and returns to my psyche; it constantly moves from myself to external sounds and back to me. It is always interrupted

and draws cycles which unfold in time; thus, it evolves into a spiralling movement which turns the current that listening is into an eddy; it causes it to double back and restively whirl between myself and the sound source. Nevertheless, hearing is in a stable state of instability, for it is through this constant flow and interruption I experience when I listen, that I negotiate a sonic mix and a sense of unity in the surrounding sonic field.[135] Hearing is stable and constant, yet in motion, engaged with a multitude of inner and outer sounds in the midst of a multi-tonal instability, in a process essential for coherence in my acoustic experience.

Hearing, like the sea that is involved in a perennial process of waste-filtering and self-renewal, is also characterised by a constant filtering out of noise, a kind of acoustic cleansing. In the environment of the human body, chemical reactions occur, whose number, given the large molecular population, is enormous.[136] The nervous system is in constant motion as information is transmitted, transformed into sparks and electric currents, and interrupted; thermal energy is generated and a stream of warm air that rises from the body rushes past the ears; there are internal movements of blood circulation and oxygen distribution. All these generate multiple sounds, innumerable internal and external perceptions, a tremendous noise (for the numbers under consideration are gigantic) yet we do not hear it. This great clamour should be heard like the noise of the sea. It should prove as intolerable as hyperacusis, the sensitivity to loud sounds, or tinnitus, the constant high-pitch whistling or ringing tone in one's own ears that seems to be coming from somewhere in the head.[137] We should drown in it or it should at least 'induce a state of discomfort, dizziness, nausea'.[138] But we perceive nothing of this sonic substratum, of these intense soundings, which, nevertheless, exist as long as our internal functions operate. There seems to be a kind of weakness in hearing, a sonic blindspot, a self-deafness. Our ears and hearing are designed to partially not hear ourselves. The attempt to understand this seems to be of value and, hearing and noise can function as a conceptual compass.

The body is a system of exchanges of messages and interruptions: from a thermodynamic point of view, on a primary level, chemical reactions within the body generate noise and mobilise information; a secondary level of reactions

receives, manipulates and integrates information and background noise that were produced in the preceding level.[139] A vast amount of such reactions takes place, and in each stage a portion of noise is translated into messages and eventually signals.[140] On the one hand, from the point of view within the system, the circuit for the transmissions of information from one part of the body to another is a form of noise, an obstacle to the message, for the message is not directly communicated but transported through the circuit. The circuit is in-between the two points in the body, a noise to the message (as well as that which makes communication between the two points possible). However, it is the message that is the crux of the matter, and as such, the circuit is 'unnoticed'[141]– it is only when the circuit cannot transmit messages in the body that it calls attention to itself through its malfunction. On the other hand, for an observer outside this system, the circuit (noise) provides information for the understanding of the system's organisation; in this case, noise is information. Thus, the perception of noise in the living organism is related to a subject and object position.[142] To hear and observe the noise of the living organism is to be a subject outside this organism observing it and its circuit. In this case, the living organism is the object. To perceive nothing of the deafening noise emitted by the system is to *be* the organism, to be the subject whose circuit functions to transmit messages and not reveal itself. Perhaps the reason the noise of the body is filtered out and must remain unnoticed is this: to constantly perceive the noise of the circuit is to always be confronted by one's own biological limits and life-sustaining functions; an acoustic experience of this kind would be overwhelming, for the body would no longer be simply the means though which the world is experienced and which stands silently against a background of noise, but is itself part of a homogeneous sonic continuum, equally 'noisy' with the world around it; its internal sounds would be inseparable from those external to it, ambiguous, blending into the clamorous background. Then my self-deafness, my sonic blind-spot is a kind of vanishing-point in my hearing beyond which there is no hearing; I cannot hear my own hearing, or the internal operations of my body. Can I hear anything else at this point?[143] To hear beyond this point is to no longer be myself; it is to give into the erosion of the distinction between myself and the background, and to let my

body be washed by the flow of entropy – that figure of physics which leads any order or structure to disorganisation and homogeneity.

Entropy in a system can be understood as that which forces energy to flow from areas with high amounts of it (of energy) to those with lower amounts, until this system reaches a state of equilibrium.[144] Therefore, entropy endows time with a single direction that is irreversible and always drifts from order to disorder, from difference to homogeneity, to a point of dissolution from which no force or motion, no energy can arise. The notion of entropy accounts for the impossibility of perpetual irreversible motion and suggests loss of hierarchy in a system; entropy is a measure of uniformity. Then, entropy is a figure equivalent to noise. This becomes apparent if the argument is approached from a communication point of view. The human organism is a system; it is a set of material points relating and reacting to one another following biochemical laws. The body receives, stores, exchanges and gives off both energy and information in forms that vary from the flow of matter which passes through it as nutrition, to oxygen and heat. External stimulations are received, transformed and perceived as information, and internal messages pass through the body to maintain its functions and keep it alive. The human organism lives and develops as long as information transmitted through and within it is transformed into messages; in other words, as long as communication within the body takes place. But, as a material living structure, the body is governed by the second law of thermodynamics according to which, in a system all energy tends toward even dissemination and entropy increases.[145] Entropy is the force that causes the human organism to age. Aging commences when the processes through which information passing through the body transforms into messages cannot keep up with the amount of information transmitted; as a result, messages remain undelivered or unresponded, communication begins to fail, and vital information becomes, not messages but, 'junk-mail', noise within the organism. This leads to malfunction as organisation within the organism begins to disintegrate, to give way to noise and erosion. As energy flows, the system loses its original distinct features and tends toward uniformity. Therefore, for the human organism entropy spells out death and keeping alive means always struggling against entropy, since

thermodynamic stability in this system means functional anarchy, cellular disorder, material disorganisation, and decay. Even if the organism finds relative stability and lives, it is against all odds. Things inside the human organism tend towards death and do not share the same temporality, for the organism is a system made of multiple cycles of cellular regeneration, of continuities and discontinuities, it combines memory and loss, it is new and old, it consists of messages and interference, it is mortal and the transmitter of a new cycle. The human organism is, therefore, in a state of liminality – a temporary knot where currents and time converge, a pocket of local order amidst the flow of entropy, a passing stable instability.

However, if the human organism is evidently a thermodynamic system always tending toward death according to an unpredictable but irreversible time, it is also an evolving system endowed with the transformative power of the mutations of selection. And this ability is no other than entropy – not that of physics, but that of the original signification of the word, the ancient en-tropé meaning 'in transformation'.[146] While in one temporal dimension (that of a lifespan) the human organism ruled by entropy tends to death, on another (that of evolution) it moves up the entropic stream by means of en-tropé, by adapting and evolving.

But how can these two movements, one toward death and sameness, the other toward transformation and change be understood in relation to one another and in relation to the organism's ability to develop, to live, to seek imbalance and yet seem to be in equilibrium?

The power to transform, this protean ability, is a gift from the sea. Proteus, the son of Poseidon, the ruler of the oceans, adopts a different form each time he is asked a question.[147] *Homer places Proteus on the islet of Pharos, at the coasts which frame the eastern boundaries of the Mediterranean world to the East. Proteus is the god of light-houses (in Greek 'pharus') and light-beams, which send messages from the edge of the earth in the middle of the shapeless night, in the middle of the sea, amidst its noise. He is a god of messages and of the noise of the sea, and the one who brings life, a beacon out of the dark, for his name means 'first-born' – born out of the marine womb, like Aphrodite.*

Proteus, with his ability to take any form, like water, embodies the first-born form whose successive shape shifting creates all subsequent forms. He is unpredictable and temperamental like the sea where he resides, but not a trickster. He always speaks the truth. To those who are not intimidated by his changes, he reveals their future. He is a god of communication and shared vision; he knows the depths of the ocean and their secrets. Like the transformations of the sea and its noise – each colour, smell, sound and current direction being a reply to a change of winds, a fluctuation of temperature and pressure in the waters – the transformations of Proteus are not ways to avoid answering questions; each transformation is a reply. (Each evolutionary change is an answer to the demands of adaptation.)

Due to the fact that energy and information flow through the human organism, it is impossible to conceive of it as an isolated, closed system. It is an open system which, in and by this state of disequilibrium, is relatively stable: it is in a state of 'homeostasis', a term which describes the equilibrium of a self-regulating system, like the human organism.[148] Both homeostasis ('homo' meaning 'same', and 'stasis' meaning 'stationary') and the word 'system' whose origin is 'histanai' (meaning 'to be' and 'to cause to stand') suggest a kind of stasis, stability. In parallel, the organism is ruled by thermodynamics, it is dying and is subject to the irreversible time of entropy, but it struggles against this time. Energy and information pass through it; any interference in their passage causes malfunction, noise; this is a signal of the process of aging and a herald of death – noise is where we come from and towards what we unfailingly move. Like hearing, which, in the constant negotiations and interruptions between external sounds and the psyche, is in a state of stable instability, the human organism too, maintains a balanced state of instability to remain alive. It is a flow of information, of messages and of noise; it is constantly reconstituted and renewed, and at the same time, it is always ruled by entropy pushing it toward dissolution.

Thus, there is a contradiction within such a living system. It is in still restlessness, in stable imbalance, like the water of the sea that moves in currents and streams, yet remains stable in the persistent collapse of its shores and the irrevocable erosion of the ground around it. As a system open to evaporation, clouds and rain, it is the same water that always comes back. That which is unstable and slowly destroyed is the solid basin, the seabed, the cliffs and rocks around it.

Therefore, the human organism, an open system, can be re-assessed not as a closure, but as a quasi-stable turbulence that a flow produces, as a current that is temporarily closed upon itself.[149] It can be thought of as a knot in the middle of the sea, a whirling current of listening that splits itself from the flow of hearing; it is an eddy that finds a state of balance and apparent independence from the flow, but is in fact of the same nature, same substance – of water and salt. It is an eddy that spins and spins in the middle of the flow – the entropic flow that threatens to undo it; it appears to move upstream against this flow, until it becomes undone. Then, its internal centripetal forces and enclosed energy flow outwards to be again in unison with the flow of the sea, until the whirls and currents form another, new eddy, elsewhere - or is it the same, protean, transformed, forgetful, repositioned?

~

Crackles

In this part of the city I am immersed in traffic noise. I am walking along a busy street and the sounds of automobile engines zoom in and out of my acoustical field. To my right, I hear a familiar expressionless female voice making an announcement whose meaning becomes lost in its echo (*this is how it always welcomes me – with a cloud of reverberation*). This echoing voice (*phoné*) has in common with Perse*phone*, the daughter of Demeter, the fact that it, too,
buries itself in a subterranean realm made of caverns hollowed out of the terrestrial crust, whose subsequent emptiness turns it into a resonating box, a musical instrument which amplifies even the smallest sound.[150] This is not just an underground station, this is not just a railway bridge, it is an acoustic bridge. I hear the noise of the street traffic, the drumming effects of the trains, the

occasional piercing sounds sent off by the sparks caused by friction between the wheels and the rail-tracks, a deep groaning din coming from all directions – the whole of London seems to reverberate under this dark railway bridge; and the cool female voice coming from the station welcomes me to the heart of the city. I walk past the bridge while the rapid steps of passers-by move towards it. Here, brief, audible electronic interruptions punctuate the sounds of the street recorded on my mini-disk. I can hear one-second long intermitted crackles, which I initially think are caused by a malfunction in my aging minidisk recorder and binaural microphones, but their familiar sound tells me that they are products of electromagnetic interference. In cellular technology of mobile telephones, speech is coded and sent out as bursts of radio-frequency signals;[151] these signals are picked up by the wiring of my recording device (which then begins to serve as an antenna) causing audible electromagnetic interference. Similarly, text-messaging signals disrupt the circuit of the minidisk and become audible crackles. Thus, a new sonic realm of crackling interferences unfolds in the course of my mobile listening experience in the city. The more I receive these unexpected disruptions, the more I notice mobile phone-using pedestrians around me. I begin to consider the crackles cryptograms that will guide my thoughts on the sonic space of the city.

A Space of Transformations

A mobile telephone is designed to connect two people in places remote from each other by means of dialling numbers. Each time a number is dialled, a telephonic connection is being established which unlocks a 'secret door' – rather than a large portal open to and shared by all – and opens an access-way to an inter-personal soundscape, a *virtual acoustic space* of verbal interaction and communication between two interlocutors. When such telephonic connections are being made, information coded into radio waves travels in the space of communication networks. On its way to its destination, this coded information interferes with the circuit of my electronic device; signals sent from one phone to another are picked up by my mini-disc and become crackles which penetrate into the acoustic space of the city that is directly audible to me. Therefore, as I walk

through the city, I hear sounds generated in my surrounding, which will be called here the *primary acoustic space* of the city, as well as the interfering sonic results of the numerological production of acoustical spaces enabled by mobile telephony: crackles. At the same time, the *primary acoustic space* of the city is perforated each time a telephonic connection is established, for the interlocution that takes place on the phone passes through and out of the immediate surrounding and connects two people in two different locations, distant from one-another. Mobile telephony generates an audio-spatial economy in which multiple aural spaces interpenetrate.[152] Ways into, through and out of the city are opened and closed as mobile telephones connect and disconnect people. Therefore, the *virtual acoustic space*, that is the one enabled by telephonic communication, perforates the *primary acoustic space* both by way of connecting people and by generating interference. Consequently, a new account of the soundscape of the city is constructed: a 'porous' sonic realm comes into being which is permeated by connections, disconnections and aural interactions enabled by mobile telephony.

At the 'pores' of this acoustical field, which are generated each time a telephonic connection is being established, the mobile-using pedestrian acquires a complex and ambiguous relationship with his/her immediate surrounding. That which is seen and the ambient sounds of the city are not necessarily closely attended to, noticed and observed.[153] The mobile telephone-user temporarily disengages from the broader visual and aural field by isolating and focusing on a reduced number of auditory stimuli: the calling tone of the connection, the voice of the interlocutor. The attention of the mobile-user is turned away from the street toward the telephonic interaction. As a result, the audio-spatial economy enabled by the mobile phone gives rise to the consideration of one's 'presence' and 'absence' by way of attention.[154] The phone-user becomes 'present' in the auditory space opened through the telephone, but also partially 'absent' from their immediate physical environment. It is the virtual auditory space of the telephonic interaction in which the mobile-user wishes to be heard, invests his/her emotions and directs his/her intellectual attention. This engagement or attention does not just happen, it is invested.[155] According to Caroline Bassett, directing one's attention is not

necessarily a free act on the part of the individual; urban pedestrians either choose to engage with a particular place or object, or they are 'selected', that is, their attention is 'caught' by something.[156] In the case of the mobile-user, however, the sounds of the telephone are selected; they are prioritised over those of the city. The mobile phone creates a different kind of pedestrian – one who is no longer necessarily embedded in his/her immediate locality but is 'here and there' at the same time, not just present in his/her conversation and not entirely 'absent' from their environment.[157]

In considering the physical presence of the mobile-user within the city, it has been argued that he/she becomes partially 'absent' from his/her physical surrounding by way of attention. A certain detachment from the environment takes place, as intellectual attention and emotions are invested in the phone conversation. From the point of view of other pedestrians, who receive only fragments of the private telephonic interaction, the sense that the mobile-interlocutor is a pedestrian disconnected from the immediate surrounding is heightened; he/she is rendered partially 'absent', for his/her availability and ability for committed, fully engaged interaction are limited.

But, what are the consequences of this partially 'absenting' kind of presence of the mobile-user within their immediate surrounding space?

For the mobile-using pedestrian the sounds transmitted through the telephone do not correspond to the visual information received though the eyes. Thus, an audio-visual discordance occurs. The 'capsule' of the telephonic conversation, in which the mobile-user immerses him/herself and invests his/her attention, suggests a materiality different to that of the immediacy of the city. As he/she focuses on the interlocution on the mobile, urban activities and sounds necessarily become a kind of background: they transform into an unravelling audio-visual track to the prioritised interactions on the mobile phone. A result of this is a process of 'dematerialisation' that the city seems to undergo. This phenomenon finds a graphic description in an essay by Caroline Bassett, in which she discusses the new experiences enabled by mobile telephony:

In the city where I live, advertising flyers are often taped to the ground by those who post them. In rain-soaked England, the images dissolve very quickly; but the taped outlines remain far longer. These empty squares produce *ad hoc* grids; hop-scotch pathways through the city. I often find myself falling into step with these grids when I use my mobile; not entirely absent-mindedly but not entirely intentionally either. This is how I walk when I am talking into another space, when I am walking *here* but listening *there*, receiving or sending text messages, making or taking calls.[158]

Whenever the author is on the mobile phone, she observes that she falls into step with grids on the ground formed by advertising fliers whose images have been disintegrated by the rain. The representation of the image fades and all that remains is an outline and a shadow – a dissolving blank area in which the image was contained. This poetic description functions as pathetic fallacy expressing the experience triggered by the mobile phone, in which a strange emptying out of the city takes place. When the sounds on the mobile are prioritised over those of the city, the physicality of the urban setting dissolves like melting paper. The city becomes a spectre, a hologram, present but strangely hollow with no acoustic depth. Furthermore, the grid drawn on the flat surface of the pavement, to which the author is strangely attracted, encourages a different understanding of the street – it prompts one to think of it in cartographic terms. A map is an artefact that is constructed according to a number of symbols and purports to represent the earth; it is a system of codes and signs which abstracts the ground. The grid is one of the signs employed in map-making which divides the represented part of the ground with parallels and meridians, and assists a reading of the ground in terms of scale rather than size. An area observed in terms of size has the exact dimensions it 'objectively' possesses. Seeing it in terms of scale, however, could mean that the area that is being observed could potentially have the size of a galaxy or a cell, for to consider something in terms of scale, rather than size, is to view it in relation to something else, to not fix its dimensions, but loosen them. It is to devise a system which abstracts the area that is being observed by cartographically representing it scaled-up or scaled-down. Therefore, the grid on

the street, described by Caroline Basset, is where a specific location and its map meet. The street transforms into a 1:1 map, in other words, the map and what is meant to represent overlap.[159] The ground becomes the simulacrum of its own map – an abstraction. This is where the ground whereon the mobile-user walks loses its topographical specificity, its dimensional and locational fixity, and acquires the abstract quality of a map. As a map it could potentially be anywhere and refer to an area of any actual size. The street where the mobile user walks is a surd – a 'somewhere' that is potentially anywhere and of any size, a 'some-place' between a real place and a represented one.

Walking in the street does not presume leaving one's private interactions behind. The mobile-user can take his/her 'world' with them. Consequently, unknown places are encountered against the sound of a private conversation and a familiar voice. Therefore, the mobile produces continuity between private and public interactions and spaces; the public and the private realm can concurrently exist. This generates a synthetic sense of familiarity with the urban setting, for when one is engaged in a private interactive scene on the mobile, a pocket of acquaintance is created even in the strangest of places. This activates a process of homogenisation between public and private. The mobile phone 'numbs' the multiplicity of sounds and spaces of urban life; it functions as an 'anaesthetic' device with which the pedestrian user can easily slide from one urban space to another, and move through diverse sonic settings, always maintaining the same level of disengagement from them, while simultaneously engaging in a familiar verbal interaction on the telephone.

In addition to this homogenising ability of the mobile telephone, it can also be seen that the mobile contributes toward the diversification of urban experience.[160] The way in which the mobile-using pedestrian partially disengages from the cityscape has already been considered – he/she may physically travel though the urban setting, but in fact channel his/her attention toward the telephone interaction; then, the urban setting where the navigation takes place becomes secondary. In this way, the mobile telephone becomes the means whereby the act of journeying through the city is partially divorced from the surrounding

cityscape. Moreover, the mobile-user in the street takes a nonlinear route through other physical locations, distant from the immediate surrounding, which can be reached instantly from the street on the mobile phone. This generates a clear distinction between the act of walking in the city and the distance traversed – the mobile-user may walk here but also travel a great distance on the telephone. In the distant locations reached on the phone, the mobile-user exists only as a voice emitted by another mobile telephone remotely placed.[161] The mobile telephone generates a virtual space which connects these physical locations and permits remote intervention. Through this possibility offered to the mobile-user to interact with and intervene in a different location, his/her step is dissociated from his/her journey. A direct consequence of this possibility to reach out from the immediate surrounding and remotely intervene is the diversification of perspectives of the mobile-user. His/her physical point of view may remain the same, but more than one acoustic standpoints are available to him/her: that of the immediate aural surrounding and that enabled by mobile telephony. The mobile telephone does not simply shift the perspective of the pedestrian, it diversifies and multiplies it.

The dissociation of the mobile-user's step from their journey is further accentuated by their mobilisation at two parallel speeds: that of the footsteps and that of communication. Each has its own dimensions and rhythm; communication speeds are much faster than those of walking (or even driving). The mobile telephone creates a sense of sudden acceleration which highlights the sharp contrast between the speed of walking and that enabled by mobile communication. This experience is different from that offered by the walkman, in which musical tempo is overlaid with that of urban activities and clock time. The personal stereo provides a continuous aural experience in which the tempo of the music opens a kind of short-cut; it assists the miscounting of real time and promotes that of music time – hence walkman's popularity with commuters.[162] The mobile telephone does not provide the continuous temporal overlay of the walkman, but enables its user to switch instantaneously from real time to that of communication. Through this multi-temporal experience generated by the mobile telephone, urban life seems diversified. It acquires a different quality: it operates at a higher speed and intensity. Similarly, the phone-using pedestrian is a different

subject: highly flexible and mobilised, with an expanded, variegated perspective and a 'new' kind of freedom that allows him/her to be accessible and have remote access at any time from virtually any place.

So far, the mobile telephone-using pedestrian has been considered in relation to his/her immediate surrounding space. It has emerged that with the mobile telephone, the urban pedestrian becomes implicated in a new kind of presence – a partially 'absenting' one, through which the ways urban life and the city are experienced are radically altered. Both pedestrian and city transform. The city seems partially dematerialised as attention is invested in the telephonic interaction. Moreover, the public and the private realms undergo a process of homogenisation as unknown spaces appear against familiar voices and private interactions on the telephone. In addition, the mobile-user occupies a space with no locational fixity or temporal uniformity. He/she is highly mobilised, able to reach out from the immediate surrounding and intervene in remote places. The interactions of the mobile-user in the city and the distance traversed by him/her are dissociated from his/her physical limits: with the mobile telephone the anatomical constraints of the body are surpassed. The human becomes more-than-human. Furthermore, the perspective of the mobile-user is changed and multiplied; in addition to the single point of view and aural standpoint of the pedestrian, a new acoustic perspective opens through the telephonic interaction. Similarly, the temporal experience of the mobile-using pedestrian increases in complexity, for he/she is mobilised at communication speeds as well as those enabled through walking. With the mobile telephone the experience of urban life is diversified, accelerated and intensified.

However, in addition to their immediate surrounding physical space, the mobile phone-user exists in the virtual sonic realm opened by the phone connection, and the remote geographical point where his/her voice is received and listened to on another mobile telephone. How can this tripartite presence of the phone-user in the street be understood?

Once a connection is established, the voice or simply text-message of the phone-using pedestrian is converted into bursts of radio waves. In this form, it is transported through the telephonic network to a different place where it changes back into an audible voice or a text message on another mobile telephone remotely located. Therefore, in addition to the physical surrounding in which the pedestrian using a mobile telephone is placed, he/she also enters another kind of realm, a virtual space of invisibility and communication networks, where he/she exists in a different form. In this process, the mobile-user becomes partially 'transubstantiated'.[163] This transition of the mobile-user from a physical presence to a radio wave links the animate with the inanimate; the human passes into the non-human and the technological. In addition, when the voice of one interlocutor is emitted by the recipient telephone, it is a disembodied voice, but has the power to 're-produce' a body for the speaker: the sounds of the breath, the popping of the lips and the audible fluidity of saliva communicate acoustically a materiality that indicates bodily corporeality. Equally, the transition of the mobile-user from a physical presence into a radio wave does not designate a disappearance but a change of form. Shifting from a visible presence to radio waves and a dislocated disembodied voice, the mobile-interlocutor transforms as he/she uses the telephone. In this transformed state the mobile-user travels faster than his/her corporeal body could ever travel, and changes shape freely rendering the boundaries between states (physical or virtual) and spaces (urban or communication) uncertain.

The transformations of the mobile speaker's voice into radio waves and a disembodied voice cause the crackling sound I receive on my mini disc; my device picks up the bursts of radio signals causing electromagnetic interference. But who or what is in fact interfered, and who or what interferes? On the one hand, my new listening experience can be considered interference, since it gains access to a sonic realm otherwise inaudible, and thus penetrates through and away from my hearing of the immediate acoustic space. I can hear crackles. It is paradoxically my 'interfered' device that 'opens' my ears to this new sonic realm. It places my hearing in-between the sounds produced in my physical surrounding and the radio waves picked up by the circuit of my minidisk.

~

My acoustic experience in the city has a direct relationship to my activity of walking. The sonic organisation of the street, as I hear it with my ears, is partially determined by the speed of my steps, my pace, my rotations and pauses. I move through the streets and I 'manipulate', 'modulate' and 'perform' the sonic material of the city by accelerating or decelerating my footsteps, changing direction or pausing. My movements through the city directly affect the way I perceive the duration, dynamics and succession of the sounds around me. I suddenly perceive myself as a walking dj; perhaps listening is not as passive an experience as I thought it was – the way I receive the sounds produced in the city are also a result of the choreography of my walk. My stroll mobilises my feet as well as my ears. My walking experience transforms my hearing of the sonic space of the city; as a kind of tuning and co-ordination take place between my ear and my step, my walking through the urban setting brings to life a new tonality.[164]

As I look at the crowd around me, I become aware of the plurality of aural perspectives, for each individual pedestrian has a different step, a different acoustical experience. The fact that hearing is highly subjective is also a biological phenomenon. It is evident in the otoacoustic emissions, in which spontaneous sounds are generated by the inner ear in response to external acoustic stimulation;[165] hearing is not merely a 'passive', receptive physiological function. These emissions are considered to be epiphenomena and byproducts of the activity of the outer hair cells in the cochlea, and are generally unnoticed, unless one's ears are exposed to continuous sounds of exceptionally high frequencies.[166] In the phenomenon of otoacoustic emissions, the interaction between the ear and its surrounding becomes apparent. The ear is active, responsive; it is engaged in a process through which an individual always receives a live mix of sounds generated in the surrounding as well as in the head. Therefore, for the pedestrian, the urban acoustic experience is also determined by the production of involuntary subjective sonic emissions. The sounds produced within the ear merge with those

of the city, rendering their different places of origin indistinguishable. Thus, a new kind of continuity is drawn between the city and the ear, the external surrounding and the interior of the individual.

I am strangely removed; I feel vacant, a little empty. To hear is to listen ***out*** *to the sounds of the city and simultaneously listen* ***in*** *to myself. I am uncertain where this inner hearing of my body stops and where the sounds of the city start. Their borders are dissolving. Something has just happened, anything – but this slight event is unlike others. It heralds something whose outlines are lost in the mist. Some thing has already begun. I am flooded by the raw sensation of sound, which seems to only possess a materiality, a roughness. How long will this feeling last? I am impatient for it to end, but also allured by it. My ears press against the soft pads of my microphones and the paved ground pushes against my feet. What I feel at this instance resembles the moment between wakefulness and sleep, when the centre of gravity of my body gently slips to the area of contact between the back of my head and the pillow; it forcefully falls just outside my body and induces the sensations of sinking and rotation in me. I try to resist with all my strength, but my body is slowly performing an uncontrollable inversion, it is turning up side down, and I am intensely nauseated by the painful joy that I am about to disappear.*

~

The sonic space of the city through which I walk has been seen as a place of transformation, but also a space that is itself transforming. The mobile-interlocutor changes, as s/he uses the telephone, from a visible presence to radio waves and a dislocated disembodied voice. In parallel, my stroll brings to life a new tonality to the city; walking transforms my hearing of the urban sonic space, as a kind of tuning takes place between my ear and my step. My speed, direction and pauses modulate the sonic information I receive through my ears. Furthermore, new sounds are constantly generated in the city while others fade away. This continuous renewal of sound inserts a form of strangeness into everyday life; it provides a different resonance to the same appearance and variation to the same

sight; there is a discrepancy between the relatively constant visual geometry of the city and its highly impermanent sonic content. Furthermore, through the interactions on mobile telephones, an acoustical continuity is threaded across different subjects and disparate spaces; at the same time, there is continuity between the city and the ear, the external surrounding and the interior of the individual. The sounds of the city merge with those produced within the ear. I hear the sounds of the city and simultaneously I involuntarily listen to myself. Hearing directs me; it guides my thoughts. But where does this crackling sound take me?

Interface - Oracle

Mobile telephones facilitate the composition of a web of acoustic relationships and correspondences. The cracklings of interference in my ears and sound-recording are the electromagnetic and audible manifestations of the connections and exchanges that take place on mobile phones somewhere else. The crackles are the points where phone-using pedestrians reaching out for other phone-users and I meet, and thus, become loci of interface.[167]

A mobile phone-using pedestrian reaches out for another with a message, which splits, on its way, into two: the crackling and the exchange of words (spoken or in text). The crackles recorded on my device, each time a mobile phone connection is about to be made, are in fact crossroads; they are triadic points where a message, which has left its sender and is reaching for its recipient, and I meet and separate. They are the loci where the three directions of the message come to a point: the one advancing from the sender, the one leading to the recipient, and that which interferes with the circuit of my device manifested in the crackle. Such points, where three directions, three roads split or converge, are the places where Hekate's or Hermes pillars used to stand.[168] Hekate, like Hermes, is a protector of travellers. Her presence and her qualities as Propylaia (the one standing before the gates) were symbolised by three faces carved on stone-pillars standing at bifurcations.[169] Depicted with three different female heads, or often with the head of a horse, a dog and a lion (or a snake), Hekate was a revered and feared guardian of doorways and the goddess of crossroads. These were crucial and

emotionally charged locations, because here journeys change direction, people meet or separate, and decisions that affect the future take place. The feelings of ambivalence associated with crossroads were expressed in the belief that invocations and puzzling oracles were uttered at these sites; crossroads were considered ominous.[170] Hekate stood at a crossroad at the magical hour of twilight, when the souls of the dead paused, before they were directed towards one of the three paths leading to the Elysian Fields, the Fields of the Asphodel or to Tartarus.[171] Therefore, this intersection was a site of judgement, and where past, present and future came together: the past of the human soul was evaluated and its future was determined. Perhaps my listening experience in the city does not share the mystical dimension of Greek myth, but it is of no less significance that I, too, am placed in a liminal position, not that of twilight or between life and death, but at an interface, between communication and interference, earth and sky. Indeed the interference I hear comes out of the blue; it literally makes a journey through the sky, from one base station to another, or travels to and from the heavens where communication satellites receive and redirect messages. Interference comes from a different, vertical dimension. Maybe it is due to this verticality and extra-dimensionality that the repeated crackles make me feel a kind of vertigo – an uneasy nausea mixed with a feeling of euphoria and confusion that a startling chance induces in me. I am listening to crackling. I am listening in-between. This is the journey of a message: it is spoken/written and sent, it becomes a crackle in my ears, it is heard/read, in other words, received by a recipient somewhere remote. Three manifestations, three directions – like Hekate's three heads – each one is individual, for it traverses one journey. The cable of my electronic device is the site where all three directions of a message come to a point – they meet and separate. The circuit of my minidisk is a hekaterion or herm not of chiselled stone but made with bits of wire.[172]

Through the binaural microphones, I record the ambience of the city; through the interfered circuit I record perplexing sounds. How can the circuit responsible for the internal operation of my device also function as an antenna receiving signals directly from the exterior, from other pedestrians around me? An inversion takes place here. How is it possible for apparent opposites to co-exist? Then, could the

incomprehensible crackling sounds also be cryptic utterances? Oracles? Could the disruption also be the message?

The cracklings I am hearing are exchanges of messages that announce themselves to me as interference. In that sense, the crackle is also part of the message. Even the god of messages, Hermes, presented himself with a disruption. This can be traced back to the history of the herald's staff with which Hermes was equipped;[173] he used it as a shepherd's stick, and always appeared with it when he delivered messages. According to Ovid, this instrument originally belonged to Tiresias, who attacked with it two snakes mating in a corpse and as a consequence, he instantly transformed into a woman. It was not until eight years later that Tiresias saw the serpents again, and by striking them once more he regained his original sex.[174] The origin of the herald's staff reveals that it is a tool of interruption: it disrupts the act of copulation – a process of creation and metamorphosis. The generative and transformative power contained within the act of mating, however, does not disappear; instead, it is transmitted to the staff, which becomes a magical wand. It is through the act of interruption that supernatural power is channelled onto the stick, which from then on becomes miraculous. The golden staff eventually passed onto Hermes by Apollo in exchange for the syrinx (the pan-pipes).[175] Through this exchange it becomes apparent that the herald's staff is itself as much of a musical instrument as the syrinx, for it beats the ground, it causes a thud, it produces sound. The interruptive knock of the striking staff is where opposites are brought to a point: a) male and female through the transformation of Tiresias' body, through the snakes' intercourse, and b) the corpse and the mating serpents, decay and reproduction, in other words death and life. Hermes' staff strikes with a thud – it causes a disruption which brings quiet and directs one's attention to him before his message is announced. Here, interruption and message come to a point. The news is heard *because* of the sound produced by the herald-god hitting the ground. Messages pass to me *because* of the crackles.

At the same time, an exchange (the telephonic discussion, the sms) turns into an incomprehensible sound, the crackle, and thus a message metamorphoses into

interference. But in order for this to happen, another peculiar conversion takes place first: the voice of the speaker (or the sms of the sender) is 'interfered'; it is translated into a coded radio signal, in other words, it is transformed. This translation/ transformation can be seen as a kind of bifurcation. As soon as it is spoken, the message splits into an audible voice and a radio signal. At this point, there is a change of direction. The differences of air pressure that travel out from the mouth to mobilise air molecules and make the voice heard, are also partially picked up by the microphone of the mobile telephone, and are sent elsewhere via the mobile antenna. It is only in this altered form of a radio signal that the message can make its way to the receiver. Therefore, change (transformation, translation, coding) is a prerequisite of communication.[176] The 'de-formation' of information is a transformation which enables communication. It is not surprising then, that Hermes, the god of messages, is also the god of transformation. If communication took place with no intermediate transformation, there would exist mere chaotic plurality: any speaker would speak their language and would be understood by everyone in *their own* language, anywhere and everywhere. But, this kind of communication, that is uninterrupted by change, by transformation, could only belong to a miraculous city: a place with no linguistic divisions, no bodies to be separated by distance. This would be a city with no atmosphere, for air-molecule vibrations transport sound, enable communication, but also diffuse sound; they cause it to fade away, and thus inhibit communication. Such city is a silent city with no crossroads, no transformations – a place where Hekate and Hermes, the gods of bifurcations and metamorphoses, are dead.

I hear the crackle and become aware that I am listening in-between communication. I am 'catching' a message after it has been sent but before it has been received. Through the crackling sound I realise that I am hearing a voice coded, after it has been translated into a radio signal but before it is decoded: I am listening to what someone is after they have 'ceased to be' what they were and before they have 'become' something else. I am witnessing a transformation.

Who and what am I in this position?[177] *I perceive inaudible frequencies, I listen and I see myself in the midst of a vast sonic field, earthly and celestial. I am placed at multiple*

crossroads, between the audible and the inaudible, between voices and radio signals, messages and crackles. Strangely, now I might know why Hermes' staff has two intertwined serpents looking at one another. Their bodies depend on each other; one sinuous serpent supports the other in a fine balance achieved by torsion. As the upper part of their bodies separate, they form a bifurcation; here, the snakes become independent from one-another. As a result, one looks to the west and the other to the east; however, their eyes meet, they communicate precisely because they are facing opposite directions. But snakes have tongues too – forked tongues. The division represented by the geometry of the serpents' bodies is further split at their mouths. There is not just one bifurcation, there are many. Messages and interference are interdependent; messages transform, they split into disruptions and even more messages – this makes communication possible. As I am listening to the sound of electromagnetic interference, it suddenly makes sense why Hekate and Hermes, the gods of bifurcations and metamorphoses are elementally connected with fire. Fire brings light, it can guide one in the dark, it can shed light onto a message; but flames split, and as they split I hear their noise, their crackles.

~

I-Escucha!

I approach the peopled street of a lively part of the city and the quality of noise I am surrounded by changes. The roars and booms of automobile combustion engines and exhaust pipes, and the innumerable cracklings of electromagnetic interference that sounded in my walk so far have given way to a great mass of sound that is moulded by the voices of the crowd around me; it fills the air and echoes between buildings. In this street, which is lined with places for metropolitan entertainment, people spill out from buildings at this hour of dusk in early autumn. They disperse and conversations begin to be heard. As soon as the sounds of the crowd become disarranged, I can hear new arrangements coming into being. Conversations pass by my ears like the buzzing of flies rushing out of a

body that has stopped bellowing and has submitted itself to the process of decay. The sonic composition of the street is a *de*-composition and a *new* composition: it is only through the diffusion and dispersal of the crowd that the appropriate levels of ambient noise are created for new aural arrangements to emerge – the sounds of the background are neither deafening, nor nocturnally quiet and conversations begin to take place.

While walking through the crowd in the street, I observe and zoom into this process. In my acoustical field I literally experience a kind of erratic zooming in and out: voices suddenly rise from the surrounding noise, their volume increases with each step I take towards them, they develop into fragments of speech which come into focus fleetingly in my ears, before losing clarity and fading into background noise. This resembles the process of scanning an object with a magnifying lens, in that narrow fields of highly defined acoustic detail, appear in the middle of a blurred, noisy periphery and become enlarged, amplified, before falling back into the background. This listening experience is radically different from that of a usual verbal exchange – I cannot make sense of what I hear in the manner I customarily do. Phrases or words emerge un-introduced and disappear un-finished, rendering the deciphering of their meaning discontinuous and comprehension sporadic. An irregular acoustical experience is produced – one, which would otherwise be possible, if an ear impairment had caused an exceptionally variable acuity of my hearing. In parallel, as I am listening attentively to vocal fragments of phrases or words around me, which may be spoken in different languages, I am confronted by sudden, brief 'messages' that have the quality of half-forgotten words; they sound familiar, yet I cannot instantly attach a signification to them.[178] While searching for their meaning, which always seems to just slip away momentarily, I receive more fragments and am confronted by new 'messages'. I find myself alone amidst 'naked' words; I am surrounded by meaningless sounds blown by the winds. These 'messages' give the sonic field around me its distinctive character. The dull, cloudy drone formed by a continuous flurry of unintelligible clamour is punctuated by momentary 'surprises', when I think I might have heard discernible words trying to say something. Sometimes, more than one is heard simultaneously, but none is distinct. They

emerge and sparkle out of the noise of the city and erratically hover past me. I listen and catch glimpses of strangely familiar fragments that loom up like peculiar airy-creatures, which emerge out of the fog before flying back into its grey depths; they are rapid, slippery, countless. The sonic field of the city is populated with restless fragments, which both send momentary 'messages', and perilously collide with one another, disturbing the air and generating a cacophony wafting in all directions. I am immersed in this sonic disorder and seek to find coherence among the disparate fragments of voices. Then, as I navigate, I begin to notice a familiar sound; I hear my own voice – I hear myself humming.

Humming

I hazard an improvisation and my tune advances from the chaotic city din like a figure appearing out of the mist. This tuneful humming assists the structuring of my acoustical and navigational experience: it instantly determines a sonorous 'centre' that is anchored deep in all the resonating cavities of my body.[179] My ears 'cling' onto my humming; my hearing is directed toward the sound of my voice; I venture the streets on its inconspicuous vibrating string and walk to its tune. The familiar timbre of my voice appears as a recognisable stabilising force in the middle of my irregular acoustic surrounding. It is a sound of reference for myself, which is relatively continuous compared to all other individual sounds around me. It is a form of resistance to the chaotic urban clamour – an opposition to its fragmentary, diverse nature. Layered over the discontinuous sounds of the city din, my humming produces a sense of coherence in my acoustical experience and navigation through the streets.

In addition, my humming adds another layer of sonority to the city and mediates my emotional state. I walk humming one improvised tune after another expressing joy, sadness, fragility, love, determination. As a result, my walk is not an emotionally neutral act; I tune my walk, like the long string of a monochord, to my feelings. The urban space becomes a sounding box – the resonating chamber for my vocal and emotional resonances. When I hum, my walk through the urban setting ceases to be merely directional and functional – it also becomes

expressive. I am emotionally charged and my experience of the urban surrounding becomes filtered though my feelings. My humming influences and colours my experience of the city.

While humming, I do not only walk from A to B, I may also walk from A minor to B major. The direction of my tune changes, like the wind. Perhaps its ability to always change is inherited by the mythical winds, which, apart from being elementally similar to my humming (by breath), are forces of change. Humming does not have a determined musical direction or a structure like a song. I do not know what I am going to hum next. My humming is not committed to a thematic development, a fundamental note, a certain tonality, any harmonic resolution or the equi-dodecatonic system of sound divisions. It is untempered with a widened chromaticism; it is atonal without suppressing tonality. Humming loosens and cuts through the tonal system, melds major and minor, and introduces microtonality by slipping through the structure of scales.

My humming is a vocal wandering, an exploration of my voice. As I hum, my voice stretches to territories where it has not yet been. It drifts off and ventures a high falsetto or a noisy profundo and, depending on the note hummed, I feel vibrations in different resonating cavities of my body, a buzzing sensation on my lips or a tickle in my ears. Each note is accompanied by a multitude of intense private bodily sensations and instigates a sensual self-gratification in my listening body.[180] My vocal explorations add an element of sonic and sensual risk to my walk and render it unpredictable. While humming, I dare take a different route in the city – be it a sonic or a spatial one. In my journey I find unfamiliar parts of me – I chance upon new sonorities in myself as I discover new sites in the urban setting. Humming fills my walk with new observations as well as with possibilities for self-discovery. It is an aural drifting which coordinates my vocal search and my urban navigation.

My humming flows by, devoid of regular units and divisions. It skips and returns, accelerates and decelerates. It comes back on itself sometimes, and sometimes lapses; here and there it is endowed with quickenings and gaps – it always

advances irregularly. When I hum, time is 'beside itself'; it is in a kind of temporal 'ecstasy', outside clock-time, since humming creates in me an imaginary simultaneity between the passing of time and the evolution of my tune, which itself is not divided into regular time units. My tune moves from a tango via a zeibekiko to a non-tempo.[181] Humming upsets relations in time; it assists the miscounting of clock-time and the duration of my walk – it undoes tempo, yet its passage affirms temporality. I am not telling the way humming divides time. To hum is to have no fixed points or measuring units; it is to be in motion, to walk with no steps, for steps divide and measure the journey. Humming is like hovering; it keeps changing direction, it moves in an apparently random way, like the wind. My humming enters the duration of my walk in the city in such a way as to transform the time lapsed into a temporal miscounting, the physical distance traversed into an invisible sonorous thread, and my motion into a kind of distraction. My time becomes stripped of any immediate interest and usefulness – humming makes a game of my time, yet my whole being is absorbed in its sonorities.

I do not resist – I become distracted and stare into space. As I hum away, I drift off. I physically travel through the street but also wonder in my thoughts. How can I map such a journey? What are the architectural implications of humming?

When I am not in my familiar private surrounding, when I feel I have no 'space', I hum. The sounds I produce create and mark an envelope in which my vocal timbre and tune convey the idiosyncrasy of my voice and expression. My vocalisations generate a personal, portable 'area' of sonority and expressiveness, which is suspended in undetermined vibrations (in noise) but presents itself against and out of it. I strive to preserve this 'area' by keeping my voice audible to my ears, by making my presence continually heard. As long as my humming 'stands out' against the noise, an outline is drawn around it beyond which there is just clamour. The resonance of my voice vibrating in my body opens up an enclosure – an interior space that I prioritise over that of the city. I hum and I launch forth in an inward direction, in the region of an interior space, where my visible and audible surroundings begin to matter less. This encourages a

distinction between what is *here*, *inside* me, and what is *there*, *outside*; it suggests an *inner* and an *outer* realm. My humming functions as a kind of spatio-phonic tool: it positions me in relation to my surrounding and marks the borders that separate me from it. It builds a territory wherein my voice is distinguished and separated out of all the sounds that it is not. Then, the thresholds between myself and the noise of the city become determined: noise is other, a stranger. Myself stands against all that is other – against the formless, ambient backdrop of urban clamour in which I am immersed; my limits against otherness become marked. That which is not part of my own vocal resonance is excluded, *cut out*. Then, humming gives rise to a problematics and an acoustics of the self: it opens a space of closure wherein myself is delineated and presented – where myself *comes about*;[182] it turns up and drifts associatively in an interior space.

I stare into space: I see the silhouette that sprang up from the noisy waters of the Mediterranean – Aphrodite Anadyomene – her body hovering above the waves, rising and standing against the liquid ocean. I look and discern her form emerging out of the grey sea-haze that is thick with salt and iodine. According to her mytho-biological origin, Aphrodite was born out of foam when Uranus' castrated genitals fell into the sea. Aphrodite's birth is the birth of beauty – the emergence of a goddess whose main quality is her presentation. Her birth is the birth of presentation. It is the moment her figure turns up. On the one hand, she is literally the outcome of castration, on the other, her presentation is the result of another kind of 'cutting': her figure is the cutting out of a silhouette against the aqueous formlessness of the sea – it cuts out a shape and separates from itself all the noise beyond.

It is through this act of *cutting out* that myself *comes about* and emerges like a form out of formlessness – I hum and a 'sonic silhouette' is *cut out* beyond which there is city din.[183] Therefore, myself *comes about* as my borders become designated. The instant of *cutting out* is the moment myself *comes about*, presents itself. This is an act of circumscription and stasis. It is characterised by fixity and singularity, since it draws a single sonic 'cut-out' against the multiplicity

of the sounds surrounding me. But fixity and singularity *are* qualities of castration, for castration is an act that imposes stillness and terminal fixity by interrupting the cycle of reproduction and the continuation of life.[184] The act of *cutting out* brings with it boundaries of exclusion. What is noise or formlessness is stipulated and arrives as otherness at the moment of *coming about*, of myself presenting itself. In excluding otherness, the act of *cutting out* also points out and designates what is other: otherness is a result of *coming about*. The act of *cutting out* is a differentiation from otherness, but also a separation from it: it stands for separateness and singularity.

But how can I think beyond exclusion and singularity, beyond neutering and sterility? I turn to the goddess of fertility to search for an answer, and it turns out that I am looking at Aphrodite again. The offspring of castration is also the embodiment of generative powers, the goddess of reproduction. The point that raised questions has returned to me as an answer. I see a paradox. Are the answers to my questions, my questions themselves? Or, all along, have I been looking for answers in the wrong places – in myths? How is it possible to reach out beyond circumscription and stillness? How can singularity and fixity in myself be challenged?

As I hum, I hear my voice rising and sinking; my humming grows and diminishes, expands and contracts. I hear my humming undergoing continuous changes which keep the sound of my voice audible to my ears, and thus keep the sonorous envelope opened up by my humming. I remain distracted. The dynamics of my voice are constantly modified, as the noise I receive from the urban surrounding always changes; that which has been defined and designated as otherness is forever shifting and varying. Thus, the act of *cutting out*, through which myself *comes about*, presents itself, cannot be a singular, lone act; in order for myself to define, present itself, it continually voices itself and designates otherness. If for a moment it stops, the thresholds between myself and otherness start dissolving. My humming voice becomes submerged in the noise of the city. The boundaries between what is inside and what outside of me are not as stable and certain as they initially appear to be. The loud cacophony of the city threatens

to overwhelm the sound of my voice at every step, to render it inaudible to my ears. My humming and the sense of coherence it produces in my acoustical and navigational experience are fragile; they are always on the verge of becoming undone. Then, the demarcations instigated by the sound of my humming become fragile; the distinction between interiority and exteriority can at any moment collapse.

Myself has to keep marking its limits against that which is outside itself. It has to keep voicing itself, first, because myself presents itself within an acoustic diminishing, always ruled by the forces of entropy, always tending towards disappearance, and second, because otherness does not come about once, it keeps arriving, always different from itself – it never ceases to arrive. Then, for myself to *come about*, to present itself is not to fix a single voice, a single presentation to itself. It is not to *come about* and *arrive* once, to terminate, to immobilise or halt itself.[185] Such a *coming about*, such an *arrival* would interrupt the *coming about* of myself, for myself has to always be engaged in defining itself against an ever-changing otherness;[186] it has to perpetually renew itself to *be about*: to keep itself, to keep itself presented. Then myself is always different from itself and always dependant on what is other than itself. For myself to *come about* is to keep *coming about*, it is to keep *arriving*. To keep *coming about* is to have *come about*, to have *arrived*, and for myself to already be different from itself, and thus to be about to *arrive*. For myself to have already *come about* and be about to *arrive* is to never entirely *come about*, to be beyond the grasp of an *arrival*. The *coming about* of myself emerges as fixity and change and impossibility at the same time.

Zephyros makes way for Aphrodite by clearing the fog hanging above the sea; and when mist gathers again, he blows to clear the air.

After Proteus came out of the open sea exhaling the smell of the bottom of the salty abyss, he lay to rest amongst his seals; he was caught there by Menelaus who wanted to know how

to sail back home; but it was not Proteus that he caught, it was a lion; but it was not a lion, it was a dragon, it was a tiger, it was a wild boar, it was a tree, it was water, it was Proteus.[187]

The narrow limits within which I find myself when I am bound to a speaking 'I', render the use of this mono-grammatic, singular container of myself – the authorial 'I' – and its reflexive form – the pronoun 'myself' – an oxymoron. The affair told by the artist is perhaps less about what is 'logical'. If I were to write it again, in the place of each 'I' there would be a bit of dissonance, a transformation; then each 'I' would be different. In addition, I would not write 'myself' in a single line, because:

myself is always still to come
myself is always in the past already
myself is always in the present.

~

Dividual

I hum, my voice wanders, and I begin to pay attention to vocal 'accidents': doubtful notes, unrefined breaks between my registers, under-the-note attacks, the popping of my lips, clicks, knots, scratches, grunts and growls. I enjoy the partial loss of control over my vocal act, and give into a play of vocal irregularities, excesses and repetitions, during which even the sound of my breath becomes an expressive acoustic opportunity. Humming leaks out of me like a breeze; it is a stream of sounds; it is a form of articulation that is in counterpoint to the realm of signification, a disarranged, scattered language; it is a constantly moving and changing physical overflowing which I cannot clasp.[188] When I hear the multifarious vocal sounds emitted by me, I no longer recognise myself in them; my voice becomes unfamiliar to me; it seems to be in 'crisis'. I attempt to reflect upon it: the disruptions in my voice 'disfigure' its familiar resonance and obstruct its ability to represent me.

Is this still myself?

My vocal 'crisis' appears to be the invisible articulation of an inner crisis.

Who am I when I hum?

Humming gives me access to who I am not.

I direct my hearing towards the emissions of this unfamiliar voice. I have the impression of a spontaneous exchange between the mouth and the ears. Soliloquy – or rather 'solo canto' – presents itself as an exchange, a 'duet'. My humming becomes a communal affair during which I am engaged in a continual rapid change between the position of the hearer and that of the vocalising subject, between myself and an 'other', an unfamiliar self. As I hum I feel that my singularity has been cross-sectioned, that I am a 'dividual'. I am alarmed by what seems to be an incomprehensible, incoherent vocal act, and by a vocal projection that has no apparent receiver. This vocal 'crisis' seems to be an invisible expression of an inward division, of a split.[189] Perhaps this is the reason I do not wish to be heard, to reveal this unfamiliar voice in me to others. I am privately experiencing sudden surprises and intense quiverings, and no-one else knows – I keep it secret. I verge towards rapture. I have gone somewhere beyond the city, beyond myself? As I hum, the mechanics of my voice production becomes unveiled, and new vocal textures are disclosed which reveal myself as being discontinuous, inconsistent. Through its vibrations, the vocal organ calls attention to a schism in myself. It narrates and reveals a 'different' self – a broken, fragmentary self, which I can neither see, nor understand: it resists both presentation and intention.

I hum and feel that this unfamiliar voice can 'expose' me, embarrass me. I hum quietly – I can hardly hear my voice. I am silencing myself. It is in this moment, when I am about to 'lose' my voice that I 'own' it, and that I want to keep it for myself.

To 'lose' my voice is to hum, for humming operates in two directions: I hum *away*, externalise my voice and 'let go' of my tune, and at the same time, while listening to my humming, an envelope opens wherein I gain access to an inner space.

Humming presents a paradox: the moment my voice resonates and opens an interiority, coincides with the moment I 'eject', I 'lose' my voice. I hum *away* and an enclosure opens in which I expand, I exteriorise my feelings and 'leave' myself – I move from confinement into an open space of self-exposure.

The continuous buzzing of my humming free-floats, as if the disparate sounds in it were seeking the part of myself to which they belong, and at the same time, it holds these sounds together. It exposes a heterogeneous voice in me, and in parallel discloses myself as being heterogeneous; the disruptions and interferences in my voice announce ruptures in myself. The ex-changes between vocalising and hearing communally portray myself but fail to represent any fixed or final version of it. Like my voice, myself reaches no singular final harmonisation; it is an echoic chamber, which vibrates sometimes in dissonance, sometimes harmonically. I listen to my humming and I feel that I gain access to unfamiliar experiences which move my 'boundaried' sense of self away from coherence and a singular speaking 'I'; they introduce a kind of mutli-directionality. To hum is to possess no *one* perspective, for this suggests a singular stand-point, a determined direction, a place where time flows in one way, and implies the existence of a sole structuring point: the vanishing point. When I hum, space and time do not make a pair – I find myself in more than one location at the same time, and travel in more than one direction: that of my walk in the city, of my tune, of my thoughts. Humming unfolds multiple spaces, each of which has its own time – the passing of time occurs synchronically in many different speeds. I become immersed in my tune; I am distracted; I am not aware of my tune's final point, but its unpredictable movements make the thought of its destination alluring. My humming moves towards an unknown, invisible, obscure and foreign point from which it seems to derive its power. It is always moving – going where?[190] I do not know. Nevertheless, I feel I am approaching a destination – not a 'sonic vanishing point', a 'point of inaudibility' beyond which I cannot hear, and which structures my aural journey. This would turn my humming into a song, which always has a determined direction and an end beyond which there is no song. While humming, I am approaching a 'sonic emergence point' from where my voice gushes forth, from where my humming keeps coming; it is a point which keeps appearing,

rather than advancing to an end – a shifting point which sends gusts of erratically moving vocalisations. It is always beyond and I am continuously approaching it as my humming and voice keep arriving in my ears. It is a point I keep nearing – every move I make towards it sends it further away from me.

~

I am distracted. This is when I hum, when I feel I have lost myself – it is when myself arrives, it comes to me. This is the space of my thoughts, which demands my whole being of myself; it makes it impossible for me to exist in any other space. But I am also in the space of the city.

There is an interval, a gap between the navigation of my body in the city and my wandering in my thoughts. It is difficult for these two worlds, the inner and the outer, to co-exist. However, to hum is to move through both of them. Humming is a form of navigation; I vocalise and listen to my tune, and thus, I traverse the distance between my mouth and my ear. This journey involves certain 'circumnavigation'; it moves from mouth, through air to ear – from myself to the city and back. My voice comes out of me, disperses and expires in the city, but also comes back to me via the city; I hear my voice merging with urban sounds, fading in the air of the city. Humming builds a sonorous bridge between myself and my surroundings; it creates a link between the inner and outer realm, and invites me to cross the line from my navigation in the city to an exploration of myself –

I feel that nothing happens except this crossing.

Humming travels from inside of me, through the outside, back into me – it draws a circle. However, the beginning and end points of this circle do not meet, for they are related to anatomically different organs (the mouth which vocalises and the ear which listens). Therefore, the circle is open, and the journey of humming, as it unfolds in time and repeats

the same motions by moving from mouth, through air, to ear, acquires the shape of a spiral. In this spiralling journey, once my breath leaves my mouth, it enters a greater spiral: it is carried by the eight winds which never linger. They seem to travel in chaotic ways, to follow no rules, to always move and change, but in fact, they have a distinct direction: my breath unites with the winds and journeys along with Boreas, Notos, Apeliotes, Zephyros, Kaikas, Evros, Lips and Argestes as they circulate the earth in spiralling motions; they move in a levorotatory direction in the Northern Hemisphere and in a dextrorotatory direction in the Southern Hemisphere.[191] *And there are specific points, too, where these motions are generated; there are centres of maximum pressure, in terms of barology, where the spirals of winds are formed.*[192] *These points are the centres where the winds meet; they are the harbingers of good or bad weather, and the heralds of change; they are the centres which distribute rains and storms; they are poles of circulation; they are the origins of aeolian forces, of the noise of the winds, of the breath of the earth, and of all that is animated by it; these centres are the lungs of the earth. This is the spiralling journey my breath takes.*

'I-escucha![193]*'*

Out of the sonic ambience, a voice speaking an incomprehensible 'word' suddenly emerges. It comes to my ears and momentarily takes my breath away. I receive it as a command. I have returned to the city; but I was already here; I have only advanced a few steps since I reached this lively street.

I thought I caught myself upon its arrival, but I only caught up with myself – myself arrived before me; it caught me unawares; it always surprises me.

After hearing the 'message' amplified to clarity I search for its signification in my mind: 'I-escucha'... I feel the stir of the breeze caused by the passer-by, before her voice swiftly sinks back into background noise as she walks on and I in the other direction.

~

Conclusion

Reflection

The theoretical hypothesis or conviction that 'voice accords presence' is at the heart of this thesis. More specifically, the thesis has aimed to reflect upon the power of voice to imply the existence of a body and a self. Voice was considered to be the invisible projection of a corporeal body – it 'phantomizes' physical presence. It 'draws out' and at the same time 'withdraws' physical presence; it implies presence and in parallel renders it a sonic spectre. But voice is also the body's sonic product that proclaims the self; it broadcasts, announces the self. Voice betokens and outpours the self in the form of sound. A number of initial questions

propelled me into this research project: If there is an interconnection between voice and the self, how does the invisible, malleable and ephemeral nature of the former, or a dramatic change in it influence or affect the latter? In the same light, how might the changes brought about by the event of the 'breaking' of the male voice be understood? Is some sort of division a consequence of this 'break'? Does this vocal 'fracture' stand for a split within male subjectivity?

'Tension' emerges when the seeming instability and impermanence, the immateriality and invisibility of voice are placed in parallel with the relative constancy and physicality of the corporeal self – a self which voice announces in the pronoun 'I' and to which voice belongs. Inspired by this apparent 'tension', the research methodology entailed the 'invention' of an imaginary (male) authorial voice to embark on a theoretical adventure: a meditation on voice and acoustic experience which explores how these might contribute to a meditation on the self. Through this authorial voice, the thesis discovered an ancient mythical representation of voice in the story of Narcissus and Echo, and ventured forth into an imaginary conceptual journey, which followed and conceptually explored the misadventures and disasters of the two heroes. In the myth, the thesis located a drama of the emergence of the self whose narrative unravels via two main incidents: the projection and echoing of Narcissus' voice, and the reflection of his image.

The first event, which takes place in an enchanted forest that functions as an acoustic, echoic chamber, was seen to occur through a dramatic 'break', a 'splitting' of the pubescent character's voice: he shouts and his projected voice and words return to him – they come back within the body of a young nymph, Echo. In Echo, the author discovered a figural presentation, an anthropomorphization of voice and a representation of Narcissus' self as a vocal projection. Her figure reveals that voice itself is a 'breaking off', a form of separation, a projection out of and away from the body. The projection of voice – Echo – inevitably recalls the moment of the emergence of the self, that is the differentiation of a subject from the mother's body and from all that is other. The projection of voice traces the

movement from unity to separation, from in-difference to difference, from the pristine unity with the maternal body to the emergence of subjectivity. The figuration of voice, however, was seen to be problematic. Although voice is invisible, amorphous, ungraspable and impermanent, in the myth it is figured with a bodily form: what is visually un-representable becomes represented. Furthermore, voice and the self, as they are represented through the mythical figure of the nymph, appear to be complicated, 'paradoxical', for she stands for appearance and invisibility, form and formlessness, darkness and light, mortality and immortality, the material and the ethereal, emergence and dissolution. This depiction of Echo does not simply implicate Narcissus – it *is* Narcissus; it reveals his own complexity and paradoxical selfhood.

Echo was seen to be standing for Narcissus' 'broken' voice that signals his passage from childhood into manhood. Firstly, this pointed to a problematization of Narcissus' masculinity. Echo is not merely a portrayal of femininity, but – paradoxically – a model of masculinity; her absent figure is the articulation of male subjectivity. She stands for femininity within the male voice, body and self, and comes to haunt them from within. She is an internalised division within the male subject which unsettles its integrity. In order to maintain a façade of masculinity, Narcissus rejects her aggressively, but Echo comes back, she keeps returning – she is the return of voice and the return of the 'repressed'. What is 'repressed'? Difference. Echo signals 'male' trouble. She is difference, otherness within him, but also alterity within his speech, within linguistic order and signification. This order was explored in the myth as an order that is male: Narcissus speaks, produces meaning – Echo diffracts his language into a multitude of signifiers; she splits his words and breaks his language. Thus Echo was conceptually equated with linguistic excess, diffusion, scattering, repetition, fragmentation of speech – she was seen to represent the feminisation of a 'crisis' in signification and the rupture of language. The myth tells of the fragile, unstable nature of an order, which works to reject that element within it that undermines its signifying and representational processes. It attempts to present that which subverts the representational power of language and shakes its meaning.

Moreover, Narcissus' phrases come back to him as a reply and a confession of love – they return different. The authorial voice discovered in the myth the narrative of the impossibility of possessing and controlling voice, of determining a single stable meaning in language, and of connecting a statement to a singular intention of a speaking self. The analysis of the myth posited voice and language as having a degree of independence from the subject that produces them, which in turn exposed difference within the self and disclosed its incoherence.

The manifestation of rupture of signification that is represented in the myth with the female body, which is eventually expelled, is followed by an event that signifies a reunion with the female, maternal body. Narcissus rejects Echo, he casts voice and enters the realm of visual representation through his image on the water. Falling for his mirror reflection, 'falling' into his own image, literally liquefying into his own representation (and destroying both himself and his image in the process), while at the same time 'falling' into silence, into muteness were seen as Narcissus' 'fall' into his mother's aqueous body, a 'fall' away from hearing language, from the order of signification, and a 'fall' into a pre-linguistic state. Through the rejection of and union with the female body, the thesis asserted that the self emerges into language by moving away from the mother's body but also that the search for the self is inevitably bound to this body. It speaks of the inescapable past of representation and linguistic meaning in the 'un-represented', the pre-lingual vocal ur-state. It tells that voice, as pure sound, recalls the pre-lingual state of unity with the mother's body before the entrance of the self into the order of linguistic signification.

In the incident of Narcissus' encounter and emotional attachment with his mirror image on the magical pond, the self is represented as a projection, only this time, of light rather than sound. Narcissus' mirror image is a representation of the self outside the body. The liquid materiality and dissolution of the image stand for the myth's conception of the self as fluid, evanescent and vulnerable. The distortions and ungraspable quality of the image suggest the impossibility of defining,

representing or entirely possessing the self. When the self is the object of representation, representation fails. But the self is not only beyond the grasp of visual figuration, it is beyond language. Narcissus identifies with a mute image; he 'sees' his self in a figure that cannot speak. When language attempts to speak of the self, language fails – the self is reduced to muteness. So what the first authorial voice discovered was a bifurcating notion of the self: one vocal or sonic and one utterly mute.

~

What is at stake in the placing of the search for the self, the quest for self-knowledge in the context of encounters with acoustic and visual self-reflections? Reflections have extraordinary powers – representational powers. They behold enchanting forces; they cause unpredictable transformations; they hide instability and deadly dangers. Reflections are disruptive. They bring about acoustic and visual rupture – points where sound and image are shattered, broken: Narcissus' voice is broken off and ejected from his body; his language is fragmented and disarranged; his image is fractured; his hearing is terminated. Through the myth, the thesis thus established a direct connection between the emergence of the self and self-reflection, and consequently pointed to the inadequacy of reflection to represent the self. The rupture of visuality and aurality in the myth of Narcissus and Echo were taken to be suggestsive of the 'paradox' that self-reflection figures the self in the very movements that disfigure, fracture and dislocate it. Self-reflection provides the self with acoustic or visual shape by disrupting, disconnecting and placing it at a distance from its physical anchor, the body; reflection dislocates the self. Once the self is displaced, the borders between what is inside and what outside the self begin to dissolve; any thresholds between self and other, self and its surrounding become uncertain, undefined; thus, a new unstable reality emerges where everything appears to be indeterminate, in crisis, and tends towards an entropic dissolution of distinctions, borders and separateness: Echo was seen as an other external to Narcissus requesting his love, but also a vocal projection of his self; further, the image on the water was

read as a visual projection of Narcissus' self, but also a beloved other. Narcissus is trapped in a situation in which he is the non-reciprocating beloved and the unreciprocated lover; the self desires and is the object of its own desire. Narcissus' rejection of his vocal reflection is a rejection of his self, otherness and nothing at the same time. The self's desire for its visual reflection is a simultaneous desire for self-knowledge, otherness and nothing.

Self-reflection may seem fundamental for the emergence of the self but is also 'paradoxical'. It renders the self an advance towards form and figuration, but also towards distortion and formlessness. As such the self must be considered as being in a continual process of making and unmaking itself. The moment the self emerges through self-reflection it dissolves to return different. The image always comes back anew; this is the return of what never returns. Its constant change renders any attempt to depict it permanently or grasp it impossible. To be incapable of 'letting go' of the image of the self is to 'lose' the self. To resist change and renewal, to cry for permanence and sameness leads to the realm of the dead; the consequences of binding the self to the eternity of presentation are deadly. The self staring at its own image, finally, is this: *when the self seeks to represent itself, to image itself, it gets lost by 'looking at' and in the 'looking for' itself.*

In the first chapter, reflections were given a primary role in the drama of the emergence for the self, not because they have the ability to represent the self, to 'lead' the way to subjecthood, but precisely because they cannot represent the self, because they interrupt representation. The self is not to be 'sought for' in representation, but in the interruption, the disruption, rupture, fracture, interference and noise that representation is. Therefore, self-reflection was placed within the context of the search for the self precisely because there is no such thing as a reflection of the self.

~

Otobiography

But if not in representation, if not in mirror-images, where can one 'seek' the self? A realization became apparent: perhaps to 'seek' it in the interference that representation must always be, that is, in interruption and noise can no longer mean 'looking for' it, but must become a 'listening out' for it. Consequently, after the study of the role of reflection for the emergence of the self in one of the founding myths of psychoanalysis – and already beginning to 'undermine' the primacy of image and vision given to the myth hitherto – the research began to approach subjectivity through sound, by 'listening out' for the self. In so doing, it continued the re-assessment of the psychoanalytic model that emphasises the foundational role of the mirror image and the visual self-reflection for the emergence of subjectivity. *Chapter Two* invented a method of research and a way of approaching the self through the practice of listening. Equipped with a kind of thinking that was informed by his findings in the myth's phonographic definition of the self, the interrelationship between sonic and visual representation, and their role for the emergence of the self, the imaginary author immersed himself in the sea of sounds of the city and embarked on a journey in which he meditated upon his listening experience and the visual associations triggered by it. Following the mythical example of Narcissus' wandering through a forest, he walked in the unstable acoustic fields of the city and began to 'reflect' acoustically. Sounds gave birth to reveries and visual associations which were radically different from his immediate surrounding. 'Breaks', disconnections occurred between his aural and visual experience. He performed a distracted kind of walk during which part of him was 'left behind'; a rupture took place within him as he shifted away from and back to himself.

This part of the project advanced conceptually by engaging in an analysis of acoustic experience, and by developing a methodology that is inspired by hearing and sound phenomena. This implied the question and subsequent justification of sound as a suitable 'tool' for a discussion on subjectivity. In order to see an object it is not necessary to observe it in motion; on the other hand, to hear a sound is to

perceive its journey from its origin to the ear. Since sound is energy in motion, to hear is to sense movement and receive energy; it is to surf on the course of a sound wave and allow oneself to travel with sound, to feel its fluctuations and transformations. It is these experiential properties of sound-perception which allowed this project to discuss the self *through* sound. Like sound, the self passes from place to place, moment to moment; like sound, it passes and dies away.

Chapter Two put forward the idea that to think as if one were hearing creates a resistance to stasis, for to remain in a single position is as good as hearing without vibrating along with sound; it is as good as being deaf. To think as if one were hearing is embracive of the shifting, synchronous, multiple perspectives of the self. It is accepting of losing and regaining focus; it is to keep and loose track, to hear and to mishear. Noise, sonic interference, interruptions, mishearing and visual associations generated by sonic events, which however do not coincide with the material origin of the sounds themselves, have been taken on board and developed.

Noise was considered an important aspect which informs our understanding of the human organism. Noise is everywhere; it is in the city and within the human body. It is a sign of entropic forces that rule the body: as energy flows, the human organism tends towards uniformity; entropy increases and leads to malfunction. As a result, information fails to be translated, transmitted and communicated; it is interrupted and interfered with. Messages become clamour; the body begins to age and 'give in' to erosion, to noise. Yet the human organism lives and develops; it is constantly reconstituted. Like hearing that flows to bring about balance and coherence in one's acoustical experience – perpetually agitated, restlessly suspended between the listener and the sound source, but constant, creating a sonic mix and a sense of acoustic unity through its perennial flow and interruption – the human organism is stable and unstable. It is constant yet always renewed in order to maintain a balanced state of instability, in order to remain alive. The human organism is a constant negotiation of flow away from and towards noise.

Noise is everywhere; it is within the human organism and in the city. It is in the crackling sound of electromagnetic interference caused by mobile telephones. The focus on the urban soundscape and its porous sonic field made of sounds generated in the immediate surrounding led to the consideration of a virtual acoustic space of verbal interaction and communication. This was a sonic realm permeated by connections and disconnections, by messages and interference. The nature of this soundscape implicates contemporary urban amblers and phone users whose relationship to their immediate environment shifts dramatically as they move in the urban sonic field. And this shift is brought about by sound; through telephonic interactions the contemporary pedestrian has become uniquely mobile and flexible, versatile and diversified as he/she disengages partially and temporarily from their broader perceptual field, and more than one aural perspectives are simultaneously available to him/her. 'Breaks', disruptions take place in the ambler's visual and aural field as disconnections occur between what one sees and what he/she hears. And this interruption, this noise is caused by communication; there is noise because of communication. But also, noise is what enables communication. There is no message without (de-)coding, translation or an intermediary; there is no message without interference and transformation, without noise. In *Chapter Two* noise thus became a point of interface, the locus where messages transform, where they split and break into more messages, where information announces itself as noise.

The study of noise and interference told us that to speak of contemporary 'presence' is to speak of what is partially 'absent' – physically present in the urban environment, but also removed from it, no longer embedded in it, but engaged in another sonic setting somewhere remote. It is to speak of a complex 'presence/absence' that transforms, shifts from a visible presence to a dislocated disembodied voice – a voice broken off from the body. This 'presence/absence' changes states and forms as it 'reaches out', as it listens and speaks, as it communicates – as it communicates the noise of communication.

~

The thesis found that out of this noise emerges a personal, portable 'territory', a sonorous envelope generated by voice – the humming voice. It discovered that humming produces a sense of coherence in one's acoustical experience and navigation through the streets; it advances like a figure out of the chaotic urban din and determines a sonorous 'centre' anchored in the body's resonating cavities. To think as if one were humming is to take a journey with bifurcating directions: one that flows towards the vibrations in the body and another that floats towards the city. It is to 'listen out' and to 'listen in' – to think about the urban surrounding as well as launch forth in an inward direction where the visible and audible surroundings begin to matter less. This project understood humming as the sound which opens a space of closure wherein a 'sonic silhouette' becomes delineated beyond which there is just the clamour of the city. All that is exterior to the self, noise is stipulated and arrives as otherness at the moment of the emergence of the self. Thus the self is dependent on what is other than itself. *Chapter Two* discovered that sound initiates a kind of enquiry that is beyond notions of exclusion, singularity and separateness. With the self comes the designation of otherness: 'I' comes with 'other' but also with 'we'; 'I' does not simply emerge, it emerges into co-existence.

The thesis observed that there are not only two directions in humming (one towards the city and one toward the interior of the body), and to think as if one were humming is not a journey with only one bifurcation. In humming, voice changes, splits and fluctuates; it slips in and out of language, it turns towards and away from the rhythm of speech, it brings inflations, breaks and tears into it and moves from signification to meaninglessness, freely, unpredictably. It is a form of vocal wandering where voice drifts off in many directions. Humming adds an element of sonic and sensual risk as it invites an exploration of the self, and coordinates urban navigation and vocal drifting. As voice diffracts and new sonorities emerge, the journey changes direction: urban navigation does not remain only functional, it also becomes expressive; thoughts scatter. *Chapter Two* found that as voice splits, it calls attention to schisms within the self, which moves from confinement to self-exposure and 'dividuation'. A 'different self' becomes

apparent, which resists representation for it is always different from itself. It keeps *coming about*; it is continuous in the discontinuity of its discrete occurrences and singular in its multiplicity; it is singular and plural.

~

In this light, the writing and the theoretical inquiry into the emergence of the self has changed. It emerged that this writing itself is autobiographical: it is the self writing about the self. Since the ear directs this writing, it is also an otobiography, which suggests that it is dynamic, like hearing, like sound. This means that in this project, writing itself could not just be considered an operation of recording, for this would imply that there is a singular, fixed event or piece of information to record, to re-present. The text is not simply a document and does not hold a fixed point of view; this is the reason it has been given predominantly in the first person, and in the present tense. It is the writing of a self in a process of change, in a process of reflecting and inscribing itself. Words (sounds and signs) do not come to a halt; they defer their foundations, transform their signifieds into new signifiers, forever cite one another. Each word is like Aeolus' sack of the winds: within it, it contains sounds, convoluted etymological histories, other words with their own complexities and multiple significations. All these blow each word in multiple different directions. This project attempted to untie the knots holding the winds closed; it sought to unleash words, discover turbulence within them and invent new directions in which sound can take them. Not only did it think through sound, it sought to conceive of a way of thinking about the *self* through sound. By employing sound as a conceptual compass, which produced unpredictable theoretical bifurcations and departures, it not only re-considered and re-assessed one of the founding myths of psychoanalysis (without going into psychoanalysis itself), but also invented a methodology to theorise the emergence of the self by proposing a way of reflecting upon it which breaks free from the predominantly visual model (which psychoanalytic thinking championed) and from the taxonomy of academic fields of knowledge.

The invention of otobiography, that is the exploration of the self through sound, challenged the way in which writing itself operated. Writing has been more than the vehicle through which research was communicated, it has also been an integral part of the project advancement and demonstration of ideas. It functioned as a multidimensional space in which a variety of writings, a multiplicity of references and quotations merged and clashed; and it was not at rest with any one of these writings. To give a single author to these texts is to impose a limit to them, a single reference and point of view that would seal the writing. To question and look for answers in a single authorial voice would have forced the text to be explained, deciphered and to remain in stasis. It would 'do away with' the author, for to demand a single answer from a single voice disregards the disunited abundance that the 'I' of the author always already is.

The Acoustics of the 'Self' sought to approach this abundance, to discover the multiple voices of the 'I'. First, the author investigated a legend that was, in essence, a narrative 'staging' that reflected the 'origin' and 'nature' of the author's own 'male' voice; in other words, the vocal 'crisis' of Narcissus spoke of the author's own vocal condition. The author's voice split, broke and divided itself: it became controlled or distorted beyond recognition, pressured by language, expressive, 'rational', 'distracted'. Similarly, through writing, this project produced ideas as the signification and position of its language constantly shifted and bifurcated; it understood the self in the celebration of the ceaseless disappointment of expectation of a singular sense and a singular perspective. But in this light, how can there be an 'authorial voice'? How can there be a 'writing'? There is no such thing as otobio*graphy*. There is no such thing as the writing of the self. Nevertheless, this writing has to be done, for to search for the words in writing is so that the 'listening out for' the self might be heard.

~

Transformations

The project discovered that the ex-changes between vocalising and hearing communally portray the self but fail to represent any fixed version of it; it proposes an 'acoustic' way of thinking about the self and foregrounds the notion of transformation.

But what is transformation, what kind of metamorphosis has be theorized? In this project, metamorphosis appeared as a state of uncertainty. Its visual representation was characterised by anatomical reorganisations which incorporated the co-existence of incompatible physical elements that rendered any biological classification ambiguous. In the Narcissus and Echo myth of Ovid's *Metamorphoses* for example, the nymph Echo becomes stones and air but retains her human voice; her exact nature is doubtful. She is human and non-human, animate and inanimate, alive and dead, present and absent. The visual representation of the metamorph stood for profound reviewing and questioning of ontological positions, physical boundaries and psychic states. This is clearly evident throughout the thesis. In the first chapter, the text discussed the blurring of the borders between male and female, the heavens and the earth, procreation and sterility, life and death. The acoustic setting of the chapter was equally concerned with metamorphosis. The voice of the 'troubadour' adopted different modes of vocalisation which changed or distorted its sound radically – often it was unclear whether the voice belonged to a man or a woman. Further, the deep anxiety about loss of distinctions and boundaries caused by transformation became expressed in a rage for classification symbolised by entomological pursuits. The 'domestic lepidopterist' encountered and accounted for a metamorphic chaos: he documented and taxonomized the changes which his surroundings underwent as moths gnawed different materials away. *Chapter Two* removed transformation from a merely mythical and insectoid biological context and located it in the urban everyday. It found metamorphorphic phenomena in the disembodied voice and extended vocal limits of the telephone interlocutor, in the conversion of voice into radio waves and electromagnetic interference, and in the ambler's experience of the dematerialisation of the city when his or her attention

shifted partially away from the immediate physical and visible surrounding. In all these instances, metamorphosis offered a means to meditate on and redefine boundaries, as well as to re-consider the interrelationship between self and other.

The thesis examined metamorphosis as a physical change, and proposed that during transformation, when structural polarities are undermined, when things appear to be indeterminate, there is an instant of self-reflection. In this instant, the self and its boundaries with the world are reviewed. During metamorphosis there is a moment of recognition of the self that coincides with a moment of psychic displacement and loss of self; metamorphosis appears as a state of change of self. Through the multiple voices of the author, the project communicated that the self 'leaves' its 'old' self behind like a discarded chrysalis and moves into another.

Finally, the project 'resolved' metamorphosis in the trope of 'anemos', the element of air, which has been presented throughout the work as the root of animation (breath) and the bringer of change (wind). The element of air was the material with which the author engaged: he physically chiselled voice into words. This project explored this ability of voice, breath and sound to become something else, to transform. It observed that the evocative and representational force of voice is so persuasive that it becomes another self; it metamorphoses into an other. The ability of voice to evoke the presence of a self is so persistent that it is at work even after the biological end of the body where the self is anchored. Air and voice metamorphose into a separate, independent self; voice escapes the control and intention of the self; it becomes another's voice. In this project, metamorphosis thus took the form of rhetoric animation and acquired Pygmalion-like qualities, for the author shaped, sculpted air, which became 'alive', animated, independent from him, dramatised.

The theme of animation of inanimate materials is most evident in the audio format of the thesis, which dramatised the text, and further emphasised the project's fascination with phenomena of transformation. Through narration, the heap of

language, which the project produced, acquired breath and sound, it became embodied, animated. The project transformed into a performance of a voice/sound composition. In voice, the work discovered a bodily material that at once revealed the body and negated its corporeality, it fled the body's physical limits and was constrained by it, it announced the self's presence and rendered it uncertain, it confirmed and withdrew it. The acoustic setting of the text provided extra-textual links between the ideas presented; it generated the opportunity to employ voice as the means not only for theoretical research, but also of expression, evocation, suggestion and affect. It emphasised the role of voice as a material, which operates with rules imposed by its physicality and its origin in the body and relation to the self. Music compositions and environmental sound fuelled the research but exceeded the grasp of descriptive, representational language; they neither illustrate the written/spoken component, nor does the text explain them. However, they co-exist, depend on and inform one another. The profusion of voices contributed to the metamorphic instability presented in the text. As the listener hears different voices, he/she flickers between boundaries: between the inner thinking voice of the author and his exterior surrounding, his daydream and his conceptualisations, his memories and his observations, between myth and the everyday, fiction and reality, speculation and academic evidence. In this manner, the project created a linguistic and textual embodiment of metamorphosis at work: it brought together dissimilar aspects of diverse writing styles, it crossed boundaries between art practice and theory, it mixed languages and reconfigured different texts and references into new forms and contexts. The authorial voice has been the crafting element that chiselled away at language and sound; voice self-transformed, juxtaposed and brought together, combined and altered, and through this process, illuminated a new, acoustic and polyphonic understanding of the self.

The theorisation of the self through its immediate acoustic context and experience, and through the 'transformation' of acoustic experience into language highlighted the role of the perceptive apparatus, of subjective experience and rhetoric, and proposed a way of carrying out a practice-based research. It allowed new relationships between self, sound and theory to emerge. Acoustic experience has

lead to a fruitful theoretical outlook, as well as practical and conceptual realisations. In addition, the form of communication of this research has been determined by the nature of the research itself. It focused on particular aspects of voice and urban listening experience. Many possibilities seem to emerge when we consider the multifaceted complexity of hearing and the great variety of spaces we inhabit. Hearing, however, is only a small part of our perceptual spectrum. Where might experiential explorations of the self that focus on touch or smell lead? What format would such research require to be communicated? One can only anticipate that our ceaseless curiosity to observe and explore ourselves, and our desire to discover new experiences and ways to communicate with one another will create multi-sensory 'symphonies'.

~

Endnotes

[1] Wayne Koestenbaum expresses the same idea by emphasising the fictional nature of the direct relationship between voice and presence: 'Voice accords presence – a myth that remains compelling, even though we are supposed to know better.' See Koestenbaum, Wayne, *The Queen's Throat: Opera, Homosexuality and the Mystery of Desire* (US, Da Capo Press, 1993), p. 154.

[2] Ibid. pp. 166-167.

[3] To my knowledge, there has been no study exclusively on this subject in a context that is not medical, psychopathological or musical. In my fieldwork within a Speech & Language Therapy clinic, where I worked with transsexual voice-feminisation and gender dysphoric patients, complex issues related to the event of the break of the voice were often encountered. The publication of a comprehensive work in this area is urgent.

[4] The title of the work is in ancient Greek and the introductory words are taken from the Greek-Orthodox liturgy. An approximate translation of *Axion Esti* is *Worthy it Is*. It has become the most recognised work of Odysseus Elytis and has been translated into many languages. In 1960 it was awarded the National Prize in Poetry. The work was critically acclaimed in Greece and abroad. In 1979 the poet was awarded the Nobel Prize for Literature. For more information on this poetic cycle and the collaboration between Mikis Theodorakis and Odysseus Elytis see http://emikis.p15137605.pureserver.info/index.php/article/articleview/204/1/56/

[5] This description was given by Mikis Theodorakis in an interview posted on his website http://emikis.p15137605.pureserver.info/index.php/article/articleview/203/1/46/.

[6] In Ovid's *Metamorphoses*, the myth appears with the title 'Narcissus and Echo'. It is noteworthy that in my bibliography I encountered the title of the myth with the name Echo forgotten/omitted/erased. In Robert Graves's seminal collection of classical tales *The Greek Myths*, the legend appears simply with the title 'Narcissus' (p. 286). Equally, the dictionary of psychoanalytic terms *The Language of Psychoanalysis* by Jean Laplanche and Jean-Bertrand Pontalis and Victoria Hamilton's *Narcissus and Oedipus: The Children of Psychoanalysis* refer to it as 'the myth of Narcissus' (p.255 and p.21 respectively); Jeremy Holmes's book *Narcissism* devoted exclusively to the subject refers to the original tale as 'the classical Narcissus myth' (p. 4).

[7] Havelock Ellis first invoked the myth of Narcissus in his *Autoerotism, a Psychological Study* (1898) to help describe a case of perverted behaviour. He linked the myth with psychological difficulty, homosexuality and pathological self-love. Paul Näcke invented the word 'narcissism' a year later in the course of commenting on Ellis's views. Sigmund Freud called upon this term in his *Three Essays on the Theory of Sexuality* (1905) to account for object-choice in homosexuals, who 'take *themselves* as their sexual object. That is to say, *they* proceed from a narcissistic basis and look for a young man who resembles *themselves* and whom *they* may love as their mother loved *them*'. See *Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. 5, trans. James Strachey (London: Hogarth Press, 1953-57), p. 44.

[8] For a discussion on painterly representations of feminised masculinity see Abigail Solomon-Godeau, *Male Trouble: A Crisis in Representation* (London, Thames and Hudson, 1997), pp.116-132

[9] For further discussion on the incorporation of femininity within the masculine see Philip Bennet, 'Musicality, Essentialism, and the Closet', in *Queering the Pitch*, ed. by P.Bennet, E.Wood & G.C.Thomas (New York & London, Routledge, 1993), pp.9-23

[10] See Hamilton, Victoria, *Narcissus and Oedipus: Children of Psychoanalysis* (London, Boston and Henley: Routledge & Kegan Paul, 1982), pp.1-14.

[11] See Halfyand, Janet, K., *Contemporary Performance*. Information on extended vocal technique. Retrieved October 20, 2003 from http://www.sequenza.org.uk/

[12] *Angry Women.* San Francisco: Re/Search Publications, 1991. Expert from an interview with Diamanda Galas. Retrieved October 20, 2003 from http://www.researchpubs.com/books/angrexc1.shtml

[13] *Meredith Monk: Biography*. Information on Meredith Monk's work at The House Foundation. Retrieved October 20, 2003 from http://www.meredithmonk.org

[14] *Rockin' on and on and on*. Expert from an interview with Bjork as it appeared in magazine Rockin' On Summer Festival Special 03. Retrieved October 20, 2003 from http://www.bjork.com/grapewire/?id=442;year=2003

[15] Patrick O'Donnell, *Echo Chambers: Figuring Voice in Modern Narrative* (Iowa City: University of Iowa Press, 1992), p. 11.

[16] See Freud, Sigmund, 'On Narcissism: An Introduction' (1914), in *On Metapsychology*, ed. Albert Dickson (London: Penguin, 1984).

[17] Please see endnote 5 above for bibliographic details of contemporary examples that use Ovid's version of the ancient myth of Narcissus and Echo but omit the name Echo in the title.

[18] According to Lacan, the mirror stage is a fundamental phase in the constitution of the human individual. It is said to be the identification of the infant with his visual self-reflection and to 'represent the genetic moment in the structure of the subject'. See Jean Laplanche & Jean-Bertrand Pontalis, The Language of Psychoanalysis (London: Karnac Books, 1988), p.251

[19] (Dennis Porter in his translation note in *The Ethics of Psychoanalysis 1959-1960: The Seminars of Jacques Lacan*, ed. Jacques-Alain Miller, trans. Dennis Porter (Great Britain: Routledge, 1992), p. vii

[20] The term *narcissean* is my neologism; I use it in order to establish a tie between my theoretical adventure and the ancient tale of Narcissus and Echo, and to allude to the themes that feature both in the myth and my enquiry. I have not employed the term

narcissistic in order to 'liberate' the myth from a mere psychoanalytic reading and place my research in context other than that of psychoanalysis.

[21] The terms 'otobiographical' and 'otobiography' are inspired by Derrida's neologism 'otobiographies', which appears only in the plural in the title of the first chapter in the book *The Ear of the Other*, which contains lectures of and discussions with Jacques Derrida. My use of the words is a direct allusion to the homophonous words 'autobiographical' and 'autobiography'. They are employed to foreground the interconnection between the self-reflexive notion of the 'auto', the 'self', and the 'oto', the ear. Derrida used the term originally in the plural in a lecture on two texts by Friedrich Nietzsche: *Ecce Homo* and *On the Future of Educational Institutions*. There is no explicit description of the meaning of this neologism. However, Derrida in his lecture develops further his idea presented seven years earlier in *Margins of Philosophy* in which he configured philosophy as the apparatus of an ear, one that has learned to tune out everything but the sound of its own name. This ear is analysed and dissected so as to lay bare the mechanism of hearing-oneself-speak. See Derrida, Jacques, *The Ear of The Other: Texts and Discussions with Jacques Derrida*, ed. by Christie McDonald, trans. Kamuf, Peggy (Lincoln, London: University of Nebraska Press, 1985); Derrida, Jacques, *Margins of Philosophy*, trans. Bass, Alan (Chicago, London: University of Chicago Press, 1984).

[22] Thibaud, Jean-Paul, 'The Sonic Composition of the City', in *The Auditory Culture Reader*, ed. Michael Bull & Les Back (Oxford and New York: Berg, 2003), pp. 329-341.

[23] Bassett, Caroline, 'How Many Movements?', in *The Auditory Culture Reader*, pp. 343-355.

[24] Ibid. p. 349

[25] Ibid. p. 351

[26] On this point, see Garrett, Stewart, *Reading Voices: Literature and the Phonotext* (Berkeley: University of California Press, 1990), p.137

[27] Leiris, Michel, *Scraps*, trans. by Lydia Davis (London: The Johns Hopkins Press, 1999), pp.14-15

[28] Ovid, *Metamorphoses*, trans. by A. D. Melville (Oxford: Oxford University Press, 1987), III. 348.

[29] Ibid. III. 357.

[30] Ibid. III. 369-371.

[31] Ovid, *Metamorphoses*, III. 386-398.

[32] Ibid. III. 411.

[33] Ovid, Metamorphoses, III. 457-463.

[34] Ovid, *Metamorphoses*, III. 376.

[35] Ovid, *Metamorphoses*, III. 348.

[36] Ovid, *Metamorphoses*, III. 386.

[37] This is a central notion in this thesis and counters Freud's emphasis on the visual aspect of the myth on which he elaborated in his essay 'On Narcissism: An Introduction' in 1914. See 'On Narcissism: An Introduction', in *On Metapsychology* (1984).

[38] The word 'mistaken' refers to Narcissus' recognition of his mirror image as himself rather than as a reflection of himself.

[39] In the introduction of *Margins of Philosophy* (1972) entitled 'Tympan', Jacques Derrida includes a column on the right side of his own text, which is a long quotation from the first volume of Michel Leiris's autobiographical memoirs, *Biffures* (1948). In this mythopoetic section, Leiris suggests that there is a connection between hearing and a subterranean

realm which he associates with Persephone, the daughter of Demeter and queen of the Underworld, who spent six months of the year in Hades and six months in the realm of the living. One explanation Leiris offers for this link is by isolating the suffix 'phone' in the name Persephone and relating it to the ancient Greek word for voice, and modern words such as 'telephone' and 'gramophone'. However, this is a false etymological connection. The name Persephone means 'she who destroys the light' and is only acoustically related to 'phone', voice. Further, Michel Leiris supports his geological reading of hearing by describing and comparing the cavernous shape of the organ of hearing and the acoustic properties of subterranean caves. See Derrida, Jacques, *Margins of Philosophy* (1984).

[40] Ariadne was the daughter of King Minos of Crete. The king had Daedalus build a Labyrinth for his illegitimate son the Minotaur. Ariadne fell in love with Theseus and gave him a thread which he let unwind through the Labyrinth so that he was able to kill the Minotaur and find his way back out again.

[41] Ovid, *Metamorphoses*, III. 463.

[42] For more on space perception, hearing and the illusion of auditory space see 'The Physical and Psychological Basis of Sound Localisation' in *Virtual Auditory Space: Generation and Applications* (1996) edited by Simon Carlile.

[43] The notion of the 'abandonment of the self' is put forward primarily in a literal sense: as he throws his voice out of his body, Narcissus leaves himself, he displaces it. Starting from this, the project will develop the use of this notion with reference to Jean-Luc Nancy's idea of the 'abandoned being' and its relation to the *pollakõs legomenon*. In *The Birth to Presence*, Nancy writes of the 'abandoned being' as the 'plurivocal being'. He asserts that 'being is not [...] anything but the *pollakõs legomenon*, the spoken-in-multiple-ways [...] there is always a *pollakõs*, an abundance, in abandon: it opens on a profusion of possibilities, just as one abandons oneself [...]' (pp.36-37).

[44] In the Orphic religion of ancient Greece, the physical body (soma) was understood to be the prison chamber and tomb (sema) for the immutable psyche of a person. http://www.archaeonia.com/religion/cults/orphic.htm

[45] For more on insect defence mechanisms see Young, Mark, *The Natural History of Moths*, (London: T & AD Poyster Ltd, 1997), pp. 100-194.

[46] Visit on line http://www.iitp.ru/lapshin/default_e.htm

[47] John E.Hill & James D.Smith, *Bats: A Natural History* (London: The British Museum, 1984), pp. 124-125.

[48] In his essay 'The German Forest' in *The House in the Woods*, 1998 (pp.24-37), Colin J.Bailey discusses mythical and painterly representations of forests in nineteenth century Germany, which he relates to the work of five contemporary sculptors. In addition to the role of the forest as a force which brings about justice, Bailey sees it as a place of religious intensity for 'an abandonment of the self' (p.24), as a cocoon or a 'kind of protective womb' (p.34), as a place of spiritual enlightenment or epiphany (p.29). See Bailey, C., Galloway, J., Kingston, A., Patrizio, A., *The House in the Woods* (Glasgow: CCA, 1998).

[49] Ovid, *Metamorphoses*, III. 374.

[50] In his essay 'Autobiography as De-facement' in *The Rhetoric of Romanticism*, Paul de Man writes that 'the figure of prosopopeia' is 'the fiction of an apostrophe to an absent [...] entity' which 'confers upon it the power of speech' (pp. 75-76). He continues with the idea that in prosopopeia 'voice assumes mouth, eye, and finally face, a chain that is manifest in the etymology of the trope's name, *prosopon poien*, to confer a mask or a face (prosopon)' (p. 76); in other words, he asserts that through this trope, voice assumes a physical

presence. Patrick O'Donnell continues this thinking; in *Echo Chambers: Figuring Voice in Modern Narrative* he is in agreement with Geoffrey H.Hartman who places the trope of prosopopeia as a 'voice with presence' (p.8). In the context of the myth of Narcissus and Echo, this trope becomes more complex: the self is represented through voice, which however is visually unrepresentable. In turn, voice 'finds' representation in the figure of a corporeal body (Echo). Thus, prosopopeia is employed in place of the absence of visual representation of a representation. See De Man, Paul, *The Rhetoric of Romanticism* (New York: Columbia University Press, 1984). For more on prosopopeia see also Chase, Cynthia, *Decomposing Figures: Rhetorical Readings in the Romantic Tradition* (Baltimore & London: The John Hopkins University Press, 1986), p. 80.

[51] For more on Echo's depiction as an Oread see Hollander, John, *The Figure of Echo: A Mode of Allusion in Milton and After* (Berkeley, Los Angeles, London: University of California Press, 1981), pp. 6-8.

[52] In the section 'Reading Lips' in her book the *Rhetoric of the Body: From Ovid to Shakespeare* (2000) Lynn Enterline also uses the word 'hollow' to describe Echo's words (p.61). She argues that the myth of Narcissus and Echo proposes a phonographic rhetoric of animation predicated on a fantasy of subjecting others to the overwhelming power of one's words, but at the same time, she also argues that it may convey a certain scepticism about whether anyone really owns these words. In this thesis the notion of 'hollowness' in Echo's words mostly addresses the status of language (during Echo's interaction with Hera) as a kind of material excess flowing uncontrollably and meaninglessly from her. This meaninglessness in Echo's language shifts dramatically when she becomes deprived of the ability to initiate speech; from then on, although she edits and fragments Narcissus' words, 'her' voicing carries signification and communicates her love.

[53] Julia Kristeva's notion of the 'semiotic' can be employed here to define Echo's oral act. Kristeva's 'semiotic' refers to that part of language which undermines signifying processes and cuts across its symbolic, formalistic syntactical and logical dimensions. In *Revolution in Poetic Language*, she focuses on the retention of the primary relation to the mother in language (the semiotic) and all that this portends for the engendering of identity, language and the acculturation of the individual subject. She writes that the subject always articulates itself by enacting a double process through which the 'semiotic' is both rejected and restored. She views the powers that restore the 'semiotic' as the remnants of 'maternal Authority' which occur in language in a variety of ways: as 'scissions of matter', noise, disruption, rhythmic irregularity, repetition, excess, all of which tear the 'veil of representation' (*Revolution in Poetic Language*, p.153)

[54] Visit on line http://66.90.77.92/Ouranos/Ekho.html

[55] Visit on line http://www.pantheon.org/articles/b/bat_kol.html

[56] Visit on line http://bible-history.com/tabernacle/TAB4The_Shekinah_Glory.htm

[57] For more on 'bat kol' (daughter of voice) and its rabbinic association with Echo see 'Echo Allegorical' in *The Figure of Echo: A Mode of Allusion in Milton and after* by John Hollander. Hollander writes of a 'minor but important' (p. 15) tradition which gives Echo a divine or prophetic character and he traces it back in the Neoplatonist mythographer Henry Reynolds's treatise *Mythomystes* (1632). According to Hollander, evidence of this notion introduced in the west by Reynolds can also be found in Milton's work (Paradise Lost IX, 653-54) 'God so commanded, and left that Command / Sole Daughter of his voice', and Wordsworth's *Duty* 'stern Daughter of the Voice of God'. Also see the discussion in

Kadushin, Max, *The Rabbinic Mind* (New York, 1952), pp. 261-63, and the entry in the *Encyclopedia Judaica* on 'bat kol'.

[58] For more on the Platonic notion of the soul and its relationship to Christian philosophies, visit on line http://www.biblestudents.com/endtimesarchives_sum03.cfm

[59] Hollander, John, (1981), p. 7.

[60] The association of Echo with celestial harmony first appears in the work *Saturnalia* by the Roman grammarian and philosopher Amrosius Theodosius Macrobius, who flourished during the reigns of Honorius and Arcadius (395-423). *Saturnalia* contains an account of discussions held at the house of Vettius Praetextatus at the Saturnalia (from the god Saturn) that was the Roman holiday marking the winter solstice. In his essay 'Great Period: Pointing, Syntax, and the Millennium in the Texts of *At a Solemn Musick*' in *Milton Quarterly* (December 2002, vol. 36, no 4, pp. 199-222) N. Moschovakis explores Marcobius's allegory of Echo as celestial harmony. To download the essay from the Internet visit on line http://www.ignetaconnect.com/ which contains a comprehensive collection of academic and professional publications. For Macrobius's *Saturnalia* books I-XXIV in Latin visit on line http://penelope.uchicago.edu/Thayer/L/Roman/Texts/Macrobius/Saturnalia/1*.html#1

[61] In relation to Echo's penetration into the realm of the dead, in *Olympian* 14, Pindar writes of Echo as the nymph who brings a bright message to the dark wall of the Underworld. Here, Echo acquires the role of Hermes, the messenger of the gods. Visit on line http://www.theoi.com/Ouranos/Ekho.html

[62] See 'Echo Acoustical' in Hollander, John (1981).

[63] Jacques Derrida questions the assumed symbiotic relation between the projection of voice, the presence of the body and the articulation of self-identity in *Speech and Phenomena and Other Essays on Husserl's Theory of Signs*. He writes that voice is a simulation whose structure is of an infinite complexity as an illusion, phantom, or hallucination. He expands on speech, representation and presence. See Derrida, Jacques, *A Derrida Reader: Between the Blinds*, edited by Peggy Kamuf, (New York: Columbia University Press, 1991), pp. 8-33.

[64] Pearsall, Judy, *The New Oxford Dictionary of English* (Oxford: Clarendon Press, 1998), p.616.

[65] In my reading of the myth of Narcissus and Echo, Echo is a representation of the self. Here, I summarise the contradictory qualities of her nature to emphasise that the attempt to develop a way of thinking about the self in relation to sound is complex and must reach beyond dualism.

[66] There is no version of this myth in which Hera and Zeus are Echo's parents; I use the words 'father' and 'mother' and a somewhat psychoanalytic terminology to allude to Freud's understanding of Sophocles' play *Oedipus Rex*, which he employed to illustrate the formative stages of an individual's psychosexual development. See Freud's text 'Three Essays on the Theory of Sexuality' (1905) in the *Standard Edition*.

[67] Hamilton, Victoria, (1982), pp.124-126.

[68] Ibid. pp. 184-186.

[69] In 'Reading Lips' and 'The Rhetoric Animation' in *The Rhetoric of the Body: From Ovid to Shakespeare*, Lynn Enterline discusses Echo and other female characters in Ovid's Metamorphoses whose language is not possessed by them. She relates this to a deep concern, present in Ovid's text, with the voice of the author and the acts of writing and reciting:

The self-conscious interlacing of conventional topoi, the citations of Ennius and of Horace [...] the (funerary) idea of a reader's speaking lips lending life to written letters, the allusion of Echo's iterations in the mouth of the mouth of the Other: all these poetic and rhetorical concerns mean that deeply Ovidian questions remain. Whose "voice" are we supposed to be hearing? [...] Ovid's closing figures may well propose a phonographic rhetoric of animation predicated on a fantasy of subjecting others to the overwhelming power of one's words. But at the same time they also convey scepticism about whether anyone really owns these words. Impersonal and disconcertingly hollow, the poem's concluding verses ask us to inquire along with Narcissus – or is it with Echo? – "is anyone here?" (p.61)

She continues on the same page by writing that 'the narrator of the *Metamorphoses* oscillates between a dream of linguistic animation – the tenacious fiction of voice-consciousness – and an uneasy sense that language, especially (and disturbingly) *spoken* language, exceeds the subjects who try to use it.' In *Echo Chambers: Figuring Voice in Modern Narrative* Patrick O'Donnell writes directly about the loss of control of language in Dickens' novel *Our Mutual Friend*:

'Something stands between the self who wishes to speak and what gets said, and no one can gain mastery over what appears to be a flood of language that fills the novel. This suppressed element signifies a partial loss of control over the speech act'.

The last example is relevant to this project, because, as it will be shown more explicitly in *Chapter Two*, I wish to also address the role of voice within a narrative produced by a male author (myself). Echo is understood as the figure which can assist in raising questions with regard to control, authorship and singularity of the speech act of the male author. It is important to note that I do not attempt to write on the 'feminine voice'; feminist theory has a considerable amount of literature on 'feminine voice', which is a critical task accomplished by superb women theorists. See Silverman, Kaja, *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema* (Bloomington: Indiana University Press, 1988) and Goldsmith, Elizabeth, ed., *Writing the Female Voice: Essays on Epistolary Literature* (Boston: Northeastern University Press, 1989). For more on the 'un-possessibility' of language by the speaking subject and the association of Echo with the writing activity of the author see 'Echo and Narcissus in Russian Symbolism' and 'Pythagoras and the Butterfly: Nabokov's Ovidian Metamorphoses' in Peter I. Barta's *Metamorphoses in Russian Modernism* (Budapest & New York: Central European University Press, 2000).

[70] The terms 'parasite' and 'host' have also been employed extensively by Michel Serres in relation to communication. In *The Parasite*, trans. Schehr, Lawrence, R. (Baltimore & London: The John Hopkins University Press, 1982), Serres defines the 'parasite' – which in addition to the signification it has in the English language, in French and Greek also means (radio wave) interference – as the element in communication which generates noise and causes interruption; the 'parasite' feeds off the relation between speaker and hearer, disrupting but also nurturing it.

[71] Ovid, *Metamorphoses*, III. 374.

[72] John Brenkman, in 'Narcissus in the Text' in *Georgia Review*, vol. 30 (Summer 1976) notes that Hera's punishment introduces a threat which Ovid tries to erase. Echo's speech is severed from her consciousness, but in order for to restore her as a self, a speaking consciousness, the narrative makes Narcissus utter sentences that she can 'use' to say what she intends to say. Thanks to this, the repetition of sounds becomes answers; but for this to occur, Echo is given a selective power. Further on this point Clair Nouvet writes that

'without this narrative inconsistency, the narrative could not turn Echo into a character. The echo could not become a speech attached to a consciousness.' See 'An Impossible Response: The Disaster of Narcissus' in *Yale French Studies: Literature and the Ethical Question* (New Haven: Yale University Press, 1991).

[73] Ovid, *Metamorphoses*, p. 393.

[74] Ibid. p. 392.

[75] See Clair Nouvet, p. 107.

[76] On the feminisation of otherness with the male see essay by Philip Brett 'Musicality, Essentialism and the Closet' in *Queering the Pitch: The New Gay and Lesbian Musicology* (1994).

[77] See Nouvet, Clair, 'An Impossible Response: The Disaster of Narcissus', p.109.

[78] Ovid, *Metamorphoses*, p. 386.

[79] Ibid. p. 397.

[80] See Blanchot, Maurice, *The Writing of the Disaster*, trans. Smock, Ann (Lincoln & London: University of Nebraska Press, 1980), pp. 5-6 & 126-138.

[81] For more on the notion of pride in the context of the myth of Narcissus and Echo see John Brenkman's essay 'Narcissus in the Text' in *Georgia Review* (1976).

[82] See Clair Nouvet.

[83] Ovid, *Metamorphoses*, III. 418.

[84] This idea is found in Paul Vallery's poem 'In Praise of Water' in *Poems*, trans. Paul, David (London: Routledge & Kegan Paul, 1984) in which he writes:

> 'And here one will understand that there is also a drunkedness
> of WATER. To drink!...To drink....Well one knows that
> pure thirst is quenched one in pure water. There is some-
> thing exact and satisfactory in this matching of the real desire
> of the organism with the element of its origin. To thirst is to
> lack a part of oneself, and thus to dwindle into another. Then
> one must make good that lack, complete oneself again, by
> repairing to what all life demands.'

[85] I claim that Narcissus cannot love because there is no *one* object to direct his love towards – his object of love is multiple – but for Maurice Blanchot, Narcissus cannot love because he is in a world where he is alone, there is no other to love. I do not contradict Blanchot's observation, but as I will explain later, I think that Narcissus is in the complicated position of being alone but also in a world populated with multiple reflections and different versions of his self. He is alone and never alone, lonely and with multiple beloveds at the same time. In addition, Blanchot's reading of Echo as 'nothing *other* to love' can be considered, to a degree, as a dismissal of her, which contradicts the intentions of this project. See Blanchot, Maurice, *The Writing of the Disaster*, pp. 125-127.

[86] For more on the 'responsibility of a response' see Jean-Luc Nancy's 'Speaking without Being Able to' in *The Birth to Presence* in which he meditates on the problematics of interlocution; Jacques Derrida's 'At this very Moment in this Work Here I Am' in *A Derrida Reader: Between the Blinds* originally in *Psyché: Inventions de l'Autre* (1978), a polyvocal essay on Levinas; 'An Open Responsibility' in Clair Nouvet's essay on Narcissus and Echo 'An Impossible response: The Disaster of Narcissus' in *Literature and the Ethical Question* (1991).

[87] Another myth about Echo tells of a similar act of mirroring which, however, beholds generative powers. The story describes the nymph's birth through the union of two hands,

those of Daktylos and Hecateris. This provides an originary, mythobiological reason for Echo's punishment and her compulsion to repeat; her entire existence, from birth to death and beyond is some sort of manifestation of mirroring. It also increases the complexity of the symbolism of mirroring. Throughout the story of Narcissus and Echo mirroring is presented as a generative, or a deadly force; it is a divine tool to bring justice or to punish; and a mortal's way to communicate with the heavens.

[88] Ovid, *Metamorphoses*, 484-494.

[89] Ibid. 468.

[90] Above, I described Narcissus' material change and disfiguration, which I see metaphorically represented (reflected) also in the dissolution of his mirror image. I believe that this is the transformation Narcissus undergoes and that it is the reason this myth is included in Ovid's *Metamorphoses*. As it will be explained later, I do not consider the narcissus flower to be Narcissus' transformation. For more on 'disfiguration' see Cynthia Chase's 'The Accidents of Disfiguration' in *Decomposing Figures: Rhetorical Readings in the Romantic Tradition* (1986); Patrick O'Donnell's chapter on James Joyce's Ulysses in *Echo Chambers: Figuring Voice in Modern Narrative*; and Mark C. Taylor's *Disfiguring: Art, Architecture, Religion* (Chicago & London: The University of Chicago Press, 1992)

[91] See Nouvet, Clair (1991).

[92] For more on the emergence of the self in relation to self doubling see Mark c. Taylor's chapter 'Desertion' in *Disfiguring: Art, Architecture, Religion* (1992) where he also discusses the use of mirrors and reflective surfaces in Pistoletto's work.

[93] Pearsall, Judy, ed., *The New Oxford Dictionary of English* (Oxford: Clarendon Press, 1998), p. 1231.

[94] Here, it should be mentioned that in Kristeva's view, the self is never formed or finished, but always hearkens back to the pre-linguistic order even as it progresses into ever more manifold linguistic networks in the acquisition of language. In Kristevan terms, the self bears the traces of all that precedes its formation. Although the self rejects or abjects the past in the very work of articulating a more formal, symbolic self who is heir to the semantic and discursive formations of a received, grammatical language, this language (of reason, order, logic – the Lacanian 'law of the Father') can never entirely rid itself of its origins in the semiotic, which for Kristeva is the pre-linguistic, the primal relation to the maternal body. See 'The Semiotic and the Symbolic' a section from Julia Kristeva's *Revolution in Poetic Language* in *The Portable Kristeva*, (New York: Columbia University Press, 2002)

[95] Ibid. 463.

[96] Earwigs are small insects of the order of Dermaptera with pairs of horny, forcepslike abdominal appendages. According to Columbia Encyclopaedia, the superstition that earwigs crawl through the ears and into the brains of seeping persons probably derives from their nocturnal habits, their carnivorous nature of some of the species, and the tarry or waxy odour of a secretion of their abdominal glands. Also, Michel Leiris, accounts this superstition in his autobiographic memoirs *Biffures* (1948), a section of which was included in Jacques Derrida's *Margins of Philosophy* (1972). See http://www.bartleby.com/65/ea/earwig.html, and a site on urban legends and folklore http://urbanlegends.about.com/library/owt/blowt-earwig.htm

[97] In *S/Z*, Roland Barthes describes the letter Z as a blade which cuts, slashes the page. See Barthes, Roland, *S/Z*, trans. Miller, Richard (Berlin, Malden, Melbourne, Oxford: Blackwell Publishing, 1990), pp. 106-107.

[98] In the audio-book format of this thesis the word 'ocular' appears before the word 'eye' to avoid confusion between the two homophonous words 'I' and 'eye'. However, my intention behind the use of these two words is also to suggest a kind of confusion (in Narcissus' psychic world) and interchangeable relationship between Narcissus' self and that which he sees, his mirror image.

[99] In *The Writing of the Disaster*, Maurice Blanchot sees the narcissus flower as morbid symbol of language/writing, 'a funereal flower or a flower of rhetoric'. p. 128.

[100] For more on grasping and child development see Hamilton, Victoria, *Narcissus and Oedipus: The Children of Psychoanalysis* (1982) pp. 7-10, and Winnicott, D., W., *Through Paediatrics to Psychoanalysis* (London: Karnac Books, 1975), pp. 50-51.

[101] See Hamilton, Victoria (1982), pp. 7-10.

[102] Maurice Blanchot discusses this idea in *The Writing of the Disaster*, p. 128.

[103] Ovid, *Metamorphoses*, 420-421.

[104] For more on the association between Liriope and Narcissus see Victoria Hamilton (1982) pp. 111-123, and Clair Nouvet (1991) pp. 126-128. Also see Maurice Blanchot's *The Writing of the Disaster* pp. 127-128 for more on Narcissus' vision of his own divinity.

[105] Ibid. 512.

[106] This contradicts other theorists' views, which I have encountered throughout the bibliography on Narcissus and Echo. Clair Nouvet's reading is an exception: 'Narcissus' story does not end, as is commonly assumed, with a metamorphosis, but with a substitution'. (*Yale French Studies*, p.127). In my thesis I propose that the myth stages a drama in which Narcissus suffers because he seeks to find a singular representation of the self and fails. In his journey for self-knowledge, he models his body after his self and thus his body ends up acquiring fluid qualities until it dissolves. The transformation of Narcissus is his liquefaction. Ultimately, the self remains formally un-represented. I do not read the narcissus flower as the boy's final transformation, for I believe that a close reading of Ovid's text reveals that there is no transformation at this point of the story. Also a transformation into a single flower would suggest a return to a singular representation of the self.

[107] See interactive BBC website on the human body
http://www.bbc.co.uk/science/humanbody/body/interactives/lifecycle/teenagers/

[108] Steven Connor writes that 'in the exercise of vocal hostility – rage, aggression, condemnation, and so on – the action of the voice upon itself is clearly visible and audible. In these modes, the voice seems to demonstrate its power to inflict harm by attacking itself, taking itself as an object or substance which may be subjected to injuring or exterminating assault'. See Connor, Steven, *Dumbstruck: A Cultural History of Ventriloquism* (New York & Oxford: Oxford University Press, 2000), p. 37. After this acute observation, Connor comments on the 'male' nature of this raging, self-attacking, masochistic kind of voice, and its urge to escape embodiment:

"The characteristic chest voice of anger, attesting, perhaps to an imaginary 'maleness', mimes the existence of a huge, boiling, bottomless reservoir of feeling [...] The voice of rage [...] presents itself as the antagonist of the sonorous envelope, the denial of the bodying and embodied nature of sound." (p. 37)

[109] Ovid, *Metamorphoses*, 478.

[110] For more on this association see chapter 'Viewless Wings: Keats's *Ode to a Nightingale*' in Chase, Cynthia, (1986).

[111] Jean-Paul Thibaud writes on doors in relation to listening to one's personal stereo: 'The transition from one's home into the public realm represents a special moment in Walkman

use [...] The door of the house may also function as a sonic door.' See Thibaud, Jean-Paul, 'The Sonic Composition of the City', in *The Auditory Culture Reader*, ed. by Michael Bull and Les Back (New York: Berg, 2003), pp.329-341 (p. 332). For many of my observations related to the sonic experience occuring while opening/closing doors, I begin from Thibaud's ideas on personal stereos and doors and expand them; however, I have chosen to use the term 'acoustic doors' rather than his term 'sonic doors'; with 'acoustic doors' I wish to emphasise the architectural and material dimensions of the experience. In his essay 'Walking in the City', Michel de Certeau argues for an 'earthly', sensual experience of the city by ordinary city practitioners who 'walk – an elementary form of this experience of the city; they are walkers [...] practitioners (who) make use of spaces [...] their knowledge of them is as blind as that of lovers in each other's arms.' De Certeau argues for such physical, sensual, erotic experience of the city in which the walker individuates and makes ambiguous the urban order given by planners, a little like the way waking life is ambiguated by dreaming. He contrasts this to the merely visual experience of the city seen from above, from a skyscraper, from a distanced spectator. See de Certeau, Michel, 'Walking in the City' in *The Practice of Everyday Life*, trans. Rendall, F., Steven (Berkeley, California: University of California Press, 1984).

[112] This idea was first presented and discussed in a lecture by sound artist and theorist Brandon La Belle given at the Architectural Association (London) on Wednesday, 5th November, 2003.

[113] See Thibaud, Jean-Paul (2003), pp.329-341.

[114] Ibid. 332

[115] See Tonkiss, Fran, 'Aural Postcards: Sound, Memory and the City', in *The Auditory Culture Reader*, pp.303-309 (p. 304).

[116] Ibid. 304

[117] This idea contradicts Thibaud's who maintains that in the domestic space one is open to the sounds around him/her. See Thibaud, Jean-Paul (2003), pp. 329-341.

[118] Bull, Michael, *Sounding Out the City: Personal Stereos and the Management of Everyday Life* (Oxford & New York: Berg, 2000), p. 17.

[119] In *The Parasite*, Michel Serres discusses a fable in Edme Boursault's comedy *Fables d'Esope* in which a noise at the door produced by the owner of a house interrupts the meal of two rats. Serres uses this example to develop his ideas on communication, interruption and the 'parasitical' role of noise as that which disrupts, but also enables communication. See, *The Parasite*, pp. 3-14. Also, see the third section of Chapter Two of this thesis ('Crackles'), which expands upon the relationship between noise and sound, message and interference.

[120] See de Certeau's understanding of the city ambler as a lover in 'Walking the City' (1984).

[121] This idea by H. Arendt in *Condition de l'Homme Moderne* (Paris: Calmann-Levy, 1961) is discussed by Thibaud in 'The Sonic Composition of the City' (2003).

[122] See Serres, Michel, *Genesis*, trans. by Genevieve James and James Nielson, 4th edn (United States of America: The University of Michigan Press, 1996), p. 61.

[123] See Richardson, Phil, *Bats* (London: The Natural History Museum, 2002), p. 106.

[124] For echolocation mechanism of bats see Hill, John, E., & Smith, James, D., *Bats: A Natural History* (London: The British Museum, 1984); also, for information and sound samples of echolocation signals visit on line http://www.batcon.org/discover/echo.html

[125] This fact was posted at the bat chamber in London Zoo on 12th September 2004.

[126] According to *The New Oxford Dictionary*, ed. by Judy Pearsall, chief ed. Patrick Hanks (Oxford: Oxford University Press, 1998), the literal meaning of anemone is the ancient Greek 'daughter of the wind'. In contemporary Greek 'ánemos' is the wind. When it appears in the plural 'ánemoi' it usually refers to the eight mythical wind gods. The root ane- means breath, soul, spirit and life from which the Latin 'animus' derives. Visit etymological dictionary and listen to MP3 sound files of the pronunciations on line at contemhttp://www.bartleby.com/61/roots/IE17.html; also find information on the wind gods on line http://www.theoi.com/Ouranos/Anemoi.html

[127] For noise as the background of information see Serres, Michel (1995), p. 7.

[128] *The New Oxford Dictionary of English* (1998), p. 1235 and p. 1258.

[129] For information on the mechanism of the inner ear and the centre of balance on-line visit on line http://depts.washington.edu/otoweb/index.htm

[130] In addition to the structures used for hearing, there are three fluid-filled semicircular canals oriented at right angles to each other: two determine vertical body movements (such as jumping and falling), while the third determines horizontal movements (such as rotation). When we turn our head, the relative movement of fluid in these canals communicates to the brain in which direction and how much we are turning. Another part of the inner ear responds to the gravitational force and informs the brain about the static position of our head. See *Cecil Textbook of Medicine*, ed. by J.Claude Bennett and Fred Plum, 20th edn (Philadelphia: W. B. Saunders Company, 1996), p. 2026

[131] Robert Smithson discusses the elemental connection between the human blood and sea water in his essay 'The Spiral Jetty', in *Land and Environmental Art*, ed. by Jeffrey Kastner & Brian Wallis (London: Phaidon, 1998), pp. 215-218 (p.216).

[132] The bibliography on the experience of listening to the noise of the sea is vast and ranges from poetry to philosophy. Jack Kerouac, one of the Beat poets and former merchant marine heard incoherent voices in the noise of the waves which he 'transcribed' in his poem 'Sea: Sounds of the Pacific Ocean at Bug Sur'. See Kerouac, Jack, *Big Sur* (London: Flamingo, 1993), pp. 167-188. Vincente Huidobro listened to sea noise in *Altazor* and heard a voice commanding: '"This noise will be tied to the sea's waves forever and the sea's waves will forever be tied to it".' See Huidobro, Vincente in *Altazor* (1919-1931), *The Selected Poetry of Vincente Huidobro*, ed. by David Guss (New York: New Directions, 1981), p. 84. For more on literally examples on the experience of sea/water noise see Douglas Kahn's chapter 'Immersed in Noise' in *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge, Massachusetts & London, England: The MIT Press, 2001). Philosopher and former marine Michel Serres writing on noise and its relation to the sea is extensive; in a unique blend of scientific discourse and lyrical outbursts, Serres foregrounds maritime lore as one of the oldest and deepest reservoirs of tacit knowledge. See my bibliography for Michel Serres titles.

[133] For more on the 'discontinuation' in the experience of listening see Kahn, Douglas, (2001), p. 43.

[134] Ibid. p. 43.

[135] Ibid. p. 43.

[136] See Serres, Michel, *Hermes: Literature, Science, Philosophy*, ed. J.V.Harari & D.F.Bell (Baltimore & London: The John Hopkins University Press, 1982), p. 76.

[137] For more on hyperacousis see essay by Dr. Mark Ross 'Developments in Tinnitus' on line at http://www.hearingresearch.org/Dr.Ross/Tinnitus.htm

[138] See Serres, Michel (1982), p. 76

[139] Ibid. p. 77.
[140] Ibid. p. 77
[141] Ibid. p. 80.
[142] In her essay entitled 'Entropy', Rosalind E. Krauss writes that 'the steady erosion of figure-ground distinction [...] seem(s) to blend imperceptibly into that *clamour* for the erasure of distinctions' (my italics). Krauss speaks of entropy in relation to the visual world of the avant-garde and employs an insectoid model to explain entropic erosions of figure-ground separations. She writes that this model 'would seem to *resonate* with the ambition internal to "high modernism" to conceive a spatial condition unique to the perceptual modality specific to the arts of vision' (my italics). It is paradoxical that she employs words which refer to sonic experience (clamour, resonate) to describe the moment figure-ground distinctions, 'unique' to visual art begin to dissolve. Krauss's choice of words reveals that the moment vision fails, a different kind of experience begins which is aurally perceived. See 'Entropy' in Bois, Yve-Alain & Krauss, E., Rosalind, *Formless: A User's Guide* (New York: Zone Books, 1977), p.75. Also see Douglas Kahn's essay 'Allan Kaprow: Immersed Noisician' in which he describes an entropic kind of dynamics in Pollock's immersion in his painting, which invites participation in a ritual loss of self; Kahn contemplates on the relationship between Pollock's work and Karpow's noisicianship. See Kahn, Douglas (2001), pp. 271-276.
[143] The last section (I-Escucha) of this thesis expands upon this question.
[144] Find information on thermodynamics on line at http://hyperphysics.phy-astr.gsu.edu/hbase/thermo/seclaw.html and http://www.panspermia.org/seconlaw.htm
[145] For more information of the second law of thermodynamics visit on-line http://www.secondlaw.com/
[146] See *The New Oxford Dictionary of English*, p. 616.
[147] The myth of Proteus is mentioned in *The Odyssey* by Homer. See Homer, *The Odyssey*, Book IV 356-571, trans. Rieu, E.V. (Albany, New Zealand, Camberwell, Aust., London, Engl., New York, USA, Rosebank, South Africa: Penguin Books, 1946), pp. 50-55. For more information on Proteus on the internet visit
http://www.archaeonia.com/religion/deities/sea_deities.htm#PROTEUS
[148] Michel Serres refers to the equilibrium in a self-regulating system with the word 'homeorrhesis' (from homo- meaning 'the same' and the ancient Greek verb 'rheo' which means 'to flow'). He employs this word to emphasise the idea of continual movement as opposed to the less dynamic idea of stasis in 'homeostasis'. The use of the latter word, which is related to the Greek 'histanai' meaning 'to be', seems more appropriate for the discussion on the emergence of the self that I develop in this project. See footnote in Serres, Michel (1982), p. 74
[149] Ibid. p. 75.
[150] For more on the association between echoing voice and the subterranean kingdom see 'The Mythical Forest' and 'Echo: The Geomorphology of a Nymph' in Chapter One of this thesis.
[151] For information on cellular technology on the internet visit
http://scis.nova.edu/~raciti/cellular.html
[152] Caroline Basset writes on the audio-spatial economy enabled by the mobile in 'How Many Movements?' in *The Auditory Culture Reader* (2003) pp. 343-355.
[153] Ibid. p. 348.
[154] Ibid. p. 348.

[155] Ibid. p. 348

[156] Caroline Bassett discusses the connections between attention and perception presented in Jonathan Crary's account of the suspension of perception in modern culture. See Basset, Caroline (2003), pp. 346-355 and Crary, Jonathan, *Suspensions of Perception* (London: MIT Press, 2000).

[157] Basset, Caroline, p. 344.

[158] Ibid. p. 343

[159] This overlapping between a geographical location and its abstraction, its visual cartographic representation was a subject that fascinated Robert Smithson who wrote extensively on it. See *Robert Smithson: The Collected Writings*, ed. by Flam, Jack (California: University of California Press, 1996).

[160] On the same subject Caroline Bassett writes that 'individuals achieve a series of negotiations between and across multiple overlapping spaces they inhabit simultaneously [...] when they use mobiles and other similar technologies.' See Bassett, Caroline (2003), p. 353.

[161] Steven Connor explores the relation between voice and developments in telecommunication technologies in *Dumbstruck: A Cultural History of Ventriloquism*. His study reveals that voices on the telephone are not 'mere' voices. In the following passage, he speaks of the physicality of telephonically transmitted voices: 'The voices that emanated from the telephone were both more mechanical and more human than ordinary voices. Talking on the telephone was more than having a conversation face to face: it was like being coiled alongside your speaking twin, their lips pressed to your ear, and your lips murmuring into theirs'. Connor, Steven (2000), p. 381.

[162] For temporal miscounting and the walkman see Thibaud, Jean-Paul, (2003), p. 339. See also Michael Bull, 'Managing Time', in *Sounding out the City: Personal Stereos and the Management of Everyday Life* (New York & Oxford: Berg, 2000), pp. 161-169.

[163] The word 'transubstantiated' is used here in its original meaning of converting or changing the form or substance of something into something different. See *The New Oxford Dictionary of English*, p.1971.

[164] Tonality is the character of a piece of music as determined by the relations between notes. See *The New Oxford Dictionary of English*, p. 1951.

[165] For more information on sounds emitted within and by the ear, on the internet, visit medical site by Atlantic Coast Ear Specialists, P.C http://www.earaces.com/oaes.htm

[166] The work of the sound artist Maryanne Amacher explores the response tones of otoacoustic emissions. In her pieces 'Head Rhythm 1' and 'Plaything 2' she claims that her aim is to release the 'music' which is produced by the listener in his/her ear. Listen to Amacher, Maryanne, *Sound Characters (making the third ear).* 1999. CD Tzadik 7043

[167] Michel Serres explores the idea of noise or interference as an interface in *The Parasite* (1982).

[168] Michel Serres draws inspiration from and explores the figure and role of the mythical god Hermes throughout his philosophical work; Jean-Luc Nancy also writes of the 'fight' (mêlée) of Hermes in *Being Singular Plural*; Hekate, the female goddess whose symbolism and role echo to a great extent that of Hermes do not appear in their (translated) writings. Like Hermes, Hekate was a protector of gates and crossroads as well as a torchbearer in the underworld; it seems that she even replaces Hermes in his role as a 'psychomombos' leading human souls to Hades. She is often depicted in Hades, leading Persephone into the subterranean kingdom. Like Hermes, Hekate was related to sorcery. However, this

aspect of her character became most dominant and evolved to misogynist depictions of her engaging in evil witchcraft. Albert Henrichs writes that 'Hecate was a popular and ubiquitous goddess from the time of Hesiod until late antiquity [...] she emerges by the 5th century as a more sinister divine figure associated with magic and witchcraft, lunar lore and creatures of the night, dog sacrifices and illuminated caves, as well as doorways and crossroads.' Visit on line at http://omega.cohums.ohio-state.edu:8080/hyper-lists/classics-l/02-02-01/0196.html. Also, for information on ancient Greek god Hermes on the internet visit http://www.pantheon.org/areas/gallery/mythology/europe/greek/hermes.html. See my bibliography for Michel Serres titles; also see Nancy, Jean-Luc, *Being Singular Plural*, trans. Richardson, R. & O'Bryan, Anne (Stanford, California: Stanford University Press, 2000).

[169] There are many comprehensive sites on the internet dedicated to Hekate. Visit http://www.theoi.com/Ouranos/Hekate.html
http://www.goddessmystic.com/CoreCurriculum/Goddesses/Hekate/index.shtml,
http://www.islandnet.com/~hornowl/HekateArticle.html, and

[170] See http://www.theoi.com/Ouranos/Hekate.html

[171] The Elysian Fields were a region in Hades where the shades (the souls of the dead) were allowed to retain their memories of past lives. The environment was peaceful and joyous and the souls were able to enjoy the pleasures they had experienced when alive. The Fields of the Asphodel was a murky gloomy plain, covered with gray plants. Virtually all the dead went to the Fields of Asphodel. Only the most wicked of mortals were punished in Tartarus. This place was known as the *Abode of the Accursed*. Tartarus was the deepest region of the Underworld. For more information on the internet visit
http://www.theoi.com/Ouranos/Hekate.html and
http://www.timelessmyths.com/classical/hades.html

[172] The hekaterion and the herm were symbolic pillars erected at crossroads and dedicated to Hekate and Hermes respectively.

[173] For more information on the herald's staff, which later became the symbol of medicine see Hall, James, *Dictionary of Subjects and Symbols in Art* (London: John Murray, 1974), p. 207.

[174] See the myth of Tiresias immediately preceding the myth of Narcissus and Echo in Ovid's *Metamorphoses*, Book III, pp. 60-61.

[175] Visit on line
http://www.pantheon.org/areas/gallery/mythology/europe/greek/hermes.html

[176] Michel Serres writes on the transformational, translational capacity of noise, 'the parasite', which both interrupts and enables communication in his book *The Parasite*. In the section entitled 'Pentecost' in the same book, he expands on a story of the Christian mythology in which the Holy Spirit appeared in the form of flames and rested on each one of the apostles causing them to speak in tongues. Here, Serres meditates on three types of communication systems and their political dimensions. One in which everything and everyone relates to everything else by the intermediate of God. Another, which operates with knots of exchange, bifurcations of decision, noise, 'parasites', for which he employs Hermes as a symbol. And a third system which connects many to many others with no intermediate, no 'parasite', no noise, no translation, which he attributes to Paraclete (the Holy Spirit). See Serres, Michel, *The Parasite*, pp. 40-47.

[177] I phrase this question but do not attempt to offer a direct reply. Jean-Luc Nancy writes: 'It is the *mêlée* of Hermes, a *mêlée* of messages and paths, bifurcations, substitutions, concurrences of codes, configurations of space, frontiers made to be passed through,

so that there can be passages, but ones that are shared – because there is never any identity that is not [...] divided, mixed up, distinguished, entrenched, common, substitutable, insubstitutable, withdrawn, exposed.'
See Nancy, Jean-Luc, *Being Singular Plural* (2000), p. 157.

[178] Contemporary composer Georges Aperghis (b.1945) speaks of this (i.e. the confusion of signifieds caused by the profusion and fragmentation of signifiers) in an interview in Miroslav Sebestik's documentary *Ecoute* (Paris: JBA Production, La Sept, Centre Georges Pompidou, Mikros-Image, Sacem, 1992). A large body of Aperghis's work explores this: *Récitations* for solo voice (1997-78) is a series of compositions made of repetitions of words which unexpectedly evolve into other words that sound similar, but whose dissociated meaning clouds comprehension; some pieces of the same work consist of words whose meaning progressively fades as they gradually transform into mere incomprehensible vocalisations. In *Récitation* 11, half-finished phrases, as if heard in the street, are spoken in an exaggerated intonation, which changes dramatically as the performer moves from one 'unfinished' phrase to another, giving the impression that she is echoes exactly what she hears around her. In *Machinations* (2000) Aperghis experiments with fragmentation of words produced by performers which are manipulated further on a computer.

[179] In *A Thousand Plateaus: Capitalism and Schozophrenia*, Gilles Deleuze and Felix Guattari write on the activity of humming/singing (they do not seem to make a distinction between the two):

'I. A child in the dark [...] comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like [...] a centre in the heart of chaos [...] II. A child hums to summon the strength for the schoolwork she has to hand in. A housewife sings to herself [...] as she marshals the antichaos forces of her work [...] III. One opens the circle not on the side where the old forces of chaos press against it but in another region, one created by the circle itself [...] This time, it is in order to join with the forces of the future, cosmic forces. One [...] hazards an improvisation [...] One ventures from home on the thread of a tune.'(p. 311)

With these examples Deleuze and Guattari introduce their notion of the Refrain in which they distinguish three aspects, which may coexist: a) a fragile centre in the midst of chaos, b) a point, a stable "pace" around which organisation takes place, a home c) a point, a "pace" onto which one grafts a breakaway from disorganisation. In '1837: Of the Refrain' in the same book, they employ examples from the animal kingdom to define the refrain as a 'territorial assemblage' (p. 312) and expand upon its social, political and philosophical significance. The refrain is linked to the spatio-temporal delineation and organization of a territory. Deleuze and Guattari begin with this notion of the refrain, which gives them the means of assessing both the reterritorializing and deterritorializing potential of music. Music can be said to reterritorialize on the refrain when it moves in the direction of what Deleuze and Guattari call a "punctual system," which is like a house erected on the territory of the refrain. This music-architecture parallel is used to characterize the representation of music in the classical Western tradition. Each sound becomes a "note," a point whose position is determined within a system of coordinates having two basic axes: the horizontal axis of the melody, in which the points form horizontal lines which are superimposed vertically on the bass line, thereby entering into polyphonic relations of counterpoint with each other; and the vertical axis of harmony, which moves along the horizontals but is not dependent on

them, in which the notes form a harmonic chord that runs from high to low and links up with the other chords. Between these two axes, diagonals of modulation or transposition can be drawn that establish localizable connections between points of different levels or moments, thereby instituting various frequencies and resonances. From this point of view, canonical genres like the sonata can be seen as "enframing" forms, like a house whose internal architectonic structure encloses various rooms and passageways. On the other hand, music is deterritorializing when it moves in a different direction, that is, when it no longer gives primacy to formal relations and structures, but to the sonorous material itself. The musician no longer demands that the note function in relation to the harmonic or melodic axis, but rather considers the sound in its singularity, as a pure force. Then, the diagonal is liberated as an autonomous dimension of space and time, when a "block of sound" is created, which escapes the coordinates of the melodic horizontal and the harmonic vertical and forms a another line that transverses, passes between the coordinates. In *What is Philosophy?*, Deleuze and Guattari suggest that modern Western music can be read as the progressive conquering of such a sonorous plane of composition. See Deleuze, Gilles & Guattari, Félix, *What Is Philosophy?*, trans. Tomlinson, Hugh & Burchell, Graham (London, New York: Verso, Columbia University Press, 1994); *A Thousand Plateaus: Capitalism and Schozophrenia*, trans. Massumi, Brian (London: The Athlone Press, 1988); and Murphy, Timothy & Smith, Daniel, 'What I Hear Is Thinking Too: Deleuze and Guattari Go Pop' in *Echo: A Music-Centred Journal*, Vol. 3.1, Spring 2001, which is an interdisciplinary, peer-reviewed on-line journal by the Department of Musicology at the University of California, Los Angeles, http://www.humnet.ucla.edu/echo/volume3-issue1/smithmurphy/index.html

[180] Wayne Koestenbaum discusses sensuality and the erotics of singing in *The Queen's Throat: Opera, Homosexuality and the Mystery of Desire* (1993). Also see Theodor Adorno's and Max Horkheimer's chapter 'Excursus I: Odysseus or Myth and Enlightenment' in *Dialectic of Enlightenment*, trans. by Cumming, John (New York: Social Studies Association, 1944) in which they discuss the power of the song of the Sirens.

[181] Zeibekiko is a traditional improvisational Greek dance in 9/8 named after the Zeybeks people of Asia Minor.

[182] The notion of a self that *comes about* is inspired by Jean-Luc Nancy's idea of the 'birth to presence', the 'coming to being' which is understood as a continual state of being born, an endless departure from otherness. Through this, in *The Birth to Presence*, Nancy questions the role of representation (which he relates to the history of 'the West' itself, the history of its limits) in 'coming to being'. He proposes that 'I' does not come before 'we' and conceives of existence as being inseparable from co-existence. See Jean-Luc Nancy (1993).

[183] My idea of the 'cut out' is implicitly related to the notion of representation which I discussed in the context of Narcissus' self-reflection in Chapter One. It is inspired by Jean-Luc Nancy's understanding of representation as a 'closure' that is 'named in many ways (appropriation, fulfilment, signification, destination, etc.); in particular, it is named "representation." Representation is what determines itself by its own limit. It is the delimitation for a subject, and by this subject, of what "in itself" would be neither represented nor representable.' See Nancy, Jean-Luc (1993) p. 1.

[184] I employ the term 'castration' here in a figurative way; however, no talk of castration is free from resonances of psychoanalytic theory and its version(s) of the emerge of the self. In relation to this, Wayne Koestenbaum makes the following acute observation:

'Observe voice culture's affinity with psychoanalysis. Both systems believe in expressing hidden material, confessing secrets. And both discourses take castration seriously: voice culture wants to recapture the castrato's scandalous vocal plenitude, while psychoanalysis imagines castration as identity's foundation – star player in the psyche's interminable opera.'
See Koestenbaum, Wayne (1993), p. 159.

[185] For a philosophical treatment of this idea see Nancy, Jean-Luc (1993) and by the same author *Being Singular Plural* (2000).

[186] Ibid.

[187] Homer, *The Odyssey*, Book IV, lines 484-502.

[188] The depiction of this vocal, physical overflowing is implicitly inspired by and referencing Kristeva's 'semiotic'. For a more extensive note on Kristeva's notion of the 'semiotic' in language see Chapter One, endnote 26 in this thesis.

[189] Wayne Koestenbaum discusses the significance and symbolism of vocal crises. See Koestenbaum, Wayne, (1993), pp. 126-129.

[190] Maurice Blanchot writes of another vocalisation and its alluring destination:
'Remember that this song (the song of the Sirens) was sung to sailors, men prepared to take risks and fearless in their impulses, and it was a form of navigation too: it was a distance, and what it revealed was the possibility of travelling that distance, of making a song into a movement towards the song and of making this movement into the expression of the greatest desire. Strange navigation, and what was its goal? [...] those who approached it were not able to do more than approach it [...] they died from impatience, from having said to soon: "Here it is; here is where I will drop anchor."'
See Blanchot's essay 'The Song of the Sirens: Encountering the Imaginary' in *The Station Hill Blanchot Reader: Fiction & Literary Essays*, ed. by George Quasha (New York: The Station Hill Press/Barrytown, 1999), pp. 443-450, (p. 444).

[191] In his essay on Michelet, Michel Serres informs us that this phenomenon is remarked by Jules Michelet, but originally observed by Edmund Halley. See Michel Serres, 'Michelet: The Soup' in Serres, Michel, (1982), pp. 29-38.

[192] Centres of the winds: Java and the West Indies. See Serres, Michel (1982), p.33.

[193] 'Escucha' is the imperative case of the Spanish verb 'escuchar' which means 'to listen'.

Bibliography

Abel-Hirsch, Nicola, *Eros* (Cambridge: Icon Books, 2001)

Adorno, Theodor, Horkheimer, Max, *Dialectic of Enlightenment*, trans. Cumming, John (London, New York: Verso, 1979)

Alpers, Svetlana, *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago, London: The University of Chicago Press, 1984)

Artaud, Antonin, *Collected Works*, Vol. 3 (London: John Calder, 1972)

Attali, Jacques, *Noise: The Political Economy of Music*, trans. Massumi, Brian (London, Minneapolis: University of Minnesota Press, 1985)

Bailey, C., Galloway, J., Kingston, A., Patrizio, A., *The House in the Woods* (Glasgow: CCA, 1998)

Bakhtin, Mikhail, *Rabelais and his World*, tras. Iswolsky, Hélène (Bloomington, Indianapolis: Indiana University Press, 1984)

Barbier, Patrick, *The World of the Castrati: The History of an Extraordinary Operatic Phenomeon*, trans. Crosland, Margaret (London: Souvenir Press, 1996)

Barta, Peter, *Metamorphoses in Russian Modernism* (Budapest & New York: Central European University Press, 2000)

Barthes, Roland, *Image, Music, Text*, trans. Heath, Stephen (London: Fontana Press, 1977)

Barthes, Roland, *Mythologies* (Paris: Editions du Seuil, 1957)

Bartley, S. Howard, *Principles of Perception* (New York: Harper & Bros, 1958)

Bandt, Ros, *Sound Sculpture: Intentions in sound and Sculpture in Australian Artworks* (Sydney: Fine Art Publishing Pty Ltd, 2001)

Bath, Michael, *Speaking Pictures: English Emblem Books and Renaissance Culture* (London, New York: Longman, 1994)

Bennet, Justin, *Noise Map* (Berlin: Meinebank, 2003)

Bergstrom, Ingrar, *Dutch Still Life Painting 17th Century* (London: Faber & Faber, 1956)

Birubaum, Heiser & Sharp, *Goug Aitken* (London: Phaidon, 2001)

Blanchot, Maurice, *The Writing of the Disaster* (Lincoln & London: University of Nebraska Press, 1995)

Blanchot, Maurice, *The Station Hill Blanchot Reader: Fiction & Literary Essays*, ed. by George Quasha (New York: The Station Hill Press/Barrytown, 1999)

Blanchot, Maurice, *The Step Not Beyond*, trans. Lycette Nelson (Albany: State University of New York Press, 1992)

Bois, Yve-Alain & Kraus, Rosalind, *Formless: A User's Guide* (New York: Zone Books, 1997)

Bosseur, Jean-Yves, *Sound and the Visual Arts: Intersections Between Music and Plastic arts Today*, trans. Holmes Brian & Carrier, Peter (Paris: Dis Voir, 1993)

Brett, Philip, Wood, Elizabeth, Thomas, Gary, ed., *Queering the Pitch: The New Gay and Lesbian Musicology* (London, New York: Routledge, 1994)

Brooks, Margaret, *A complete Guide to British Moths (Macrolepidoptera)* (London: Jonathan Cape, 1991)

Bryson, Norman, *Looking at the Overlooked: Four Essays on Still Life Painting* (London: Reaktion Books, 1990)

Bull, Michael, *Sounding Out the City: Personal Stereos and the Management of Everyday Life* (New York, Oxford: Berg. 2000)

Bull, Michael, Back, Les, ed., *The Auditory Culture Reader* (New York, Oxford: Berg, 2003)

Cage, John, *A Year from Monday* (USA: Wesleyan University Press, 1969)

Cage, John, *Etchings* (California: Point Publications, 1982)

Cardiff, Janet, *The Missing Voice (Case Study B)* (London: Artangel, 1999)

Carlile, Simon, ed., *Virtual Auditory Space: Generation and Application* (Berlin: Springer-Verlag, 1996)

Chase, Cynthia, *Decomposing Figures: Rhetorical Readings in the Romantic Tradition* (Baltimore and London: The Johns Hopkins University Press, 1986)

Chion, Michel, *Audio-Vision: Sound on Screen* (New York: Columbia University Press, 1994)

Chion, Michel, *The Voice in Cinema* (New York: Columbia University Press, 1999)

Cicely, Berry, *Voice and the Actor* (London: Harrap, 1973)

Clausen, Lucy W., *Insect: Fact and Folklore* (New York: The American Museum of National History, Columbia University & Macmillan Comda, 1954)

Clayton, Martin, Herbert, Trevor, Middleton, Richard, *The Cultural Study of Music: A Critical Introduction* (London, New York: Routledge, 2003)

Collons, Margaret S., *The Insect in Art* (London: Natural History Museum, ?)

Connor, Steven, *The Book of Skin* (London: Reaktion Books Ltd, 2003)

Connor, Steven, *Dumbstruck: A Cultural History of Ventriloquism* (New York, Oxford: Oxford University Press, 2000)

Cooper, Emmanuel, *The Sexual Perspective: Homosexuality and Art in the Last 100 years in the West* (London, New York: Routledge, 1994)

Cox, Christoph, Warner, Daniel, ed., *Audio Culture: Readings In Modern Music* (London, New York: Continuum, 2004)

Crary, Jonathan, *Suspensions of Perception* (London: MIT Press, 2000)

Crystal, David, ed., *The Cambridge Encyclopaedia* (Cambridge: Cambridge University Press, 1994)

Davies, M. & Kathirithamby, J., *Insect Myths* (London: Gerald Duckworth & Co Ltd, 1986)

de Certeau, Michel, *The Practice of Everyday Life*, trans. Rendall, F., Steven (Berkeley, California: University of California Press, 1984).

Deleuze, Gilles, Guattari, Félix, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minnesota: University of Minnesota Press, 1987)

De Man, Paul, *The Rhetoric of Romanticism* (New York: Columbia University Press, 1984)

Derrida, Jacques, *Margins of Philosophy*, trans. Bass, Alan (Chicago, London: University of Chicago Press, 1984)

Derrida, Jacques, *The Ear of The Other: Texts and Discussions with Jacques Derrida*, ed. by Christie McDonald, trans. Kamuf, Peggy (Lincoln, London: University of Nebraska Press, 1985)

Desnos, Robert, Leiris, Michel, Limbour, Georges, Peret, Benjamin, *The Automatic Muse* (London: Atlas Press, 1994)

Dicke, Marcel, 'Insects in Western Art', in *The American Entomologist*, Vol. 64, no.4 (Lauham: Entomological Society of America, winter 2000)

Dickson, Richard, *A Lepidopterist's Handbook, Vol.13* (Middlesex: The Amateur Entomologist Society, 1976)

Duplaix, Sophie, Lista, Marcella, *Sons& Lumières: Une Histoire du Son Dans l'Art du XXe Siècle* (Paris: Centre Pmpidou, 2004)

During, Simon, ed., *The Cultural Studies Reader* (London, New York: Routledge, 1993)

Dyson, A.E., *Yeats, Eliot and R.S. Thomas* (London, Basingstoke: The Macmillan Press, 1981)

Enterline, Lynn, *The Rhetoric of the Body: From Ovid to Shakespeare* (Cambridge: Cambridge University Press, 2000)

Fabre, Jan, *Fabre's Book of Insects, Vol. 1* (Hannover: Imschoot, Uitgevers – Gent, 1999)

Ferguson, R., Kahn, D., Kwon, M., Licht, A., *Christian Marclay* (Los Angeles: UCLA, Hammer Museum, Steidl, 2003)

Fried, Michael, *Realism, Writing, Disfiguration: On Thomas Eakins and Stephen Crane* (Chicago, London: The University of Chicago Press, 1987)

Freud, Sigmund, *Introductory Lectures on Psychoanalysis* (London: Penguin Books, 2004)

Freud Sigmund, *Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. 5, trans. Strachey, James (London: Hogarth Press, 1953-57)

Freud Sigmund, 'Mourning and Melancholia', in *Standard Edition of the Complete Psychological Works of Sigmund Freud,* Vol. 14 (London Hogarth Press, 1953-74)

Freud, Sigmund, *The Essentials of Psychoanalysis* (London: Penguin Books, 1986)

Galinsky, Karl G., *Ovid's Metamorphoses: An Introduction to Basic Aspects* (Oxford: Basil Blackwell, 1975)

Gilmore David, D., *Manhood in the Making: Cultural Concepts of Masculinity* (New Haven & London: Yale University Press, 1990)

Goldberg, Jonathan, *Voice Terminal Echo: Postmodernism and English Renaissance Texts* (New York and London: Methuen, 1986)

Gomrich, E.H. & Gregory, R.L., *Illusion in Nature and Art* (London: Duckworth, 1973)

Grant, Michael, *Myths of the Greeks and Romans* (London: Readers Union, Weidenfeld & Nicolson, 1964)

Graves, Robert, *The Greek Myths* (London: Pelican Books, 1960)

Grimal, Pierre, *A Concise Dictionary of Classical Mythology* (Oxford: Basil Blackwell, 1986)

Hall, James, *Subjects & Symbols in Art* (London: John Murray, 1974)

Hamilton, Victoria, *Narcissus and Oedipus: Children of Psychoanalysis* (London, Boston and Henley: Routledge & Kegan Paul, 1982)

Hickin, Norman E., *Household Insect Pests* (London: Associated Bussiness Programmes library Ltd, 1974)

Hill, Dennis S., *The Economic Importance of Insects* (London: Chapman & Hall, 1997)

Hill, John, E., & Smith, James, D., *Bats: A Natural History* (London: The British Museum, 1984)

Hoet, Jan, *Jan Fabre* (Tokyo: Watari-um, 1991)

Holmes, Jeremy, *Narcissism*, (Cambridge: Icon Books, 2001)

Houlgate, Stepher, ed., *The Hagel Reader* (Massachusetts, Oxford: Blackwell Publishers, 1998)

Huidobro, Vincente in *Altazor* (1919-1931), *The Selected Poetry of Vincente Huidobro*, ed. by David Guss (New York: New Directions, 1981)

Husler, Frederick, Rodd-Marling, Yvonne, *Singing: The Physical Nature of the Vocal Organ, a Guide to the Unlocking of the Singing Voice* (Auckland, Johannesburg, London, Melbourne, Sydney: Hutchinson, 1965)

Hollander, John, *The Figure of Echo: A Mode of Allusion in Milton and After* (Berkeley, London, Los Angeles: University of California Press, 1981)

Kahn, Douglas, *Noise Water Meat: a History of Sound in the Arts* (London: The MIT Press, 1999)

Kahn, Douglas, Whitehead, Gregory, ed., *Wireless Imagination: Sound, Radio and the Avant-Garde* (Cambridge, Massachusetts, London, England: The MIT Press, 1994)

Kamuf, Peggy, ed., *A Derrida Reader: Between the Blinds* (New York: Columbia University Press, 1991)

Kerouac, Jack, *Big Sur* (London: Flamingo, 1993)

Koestenbaum, Wayne, *The Queen's Throat: Opera, Homosexuality and the Mystery of Desire* (USA: Da Capo Press, 2001)

Kofler, Leo, *The Art of Breathing as the Basis of Tone Production* (London: J. Curwen & Sons Ltd, 1897)

Kristeva, Julia, *The Portable Kristeva*, ed. by K. Oliver (New York: Columbia University Press, 2002)

Kristeva, Julia, *Tales of Love*, trans. Roudiez, Leon S. (New York: Columbia University Press, 1941)

Kritsky G. & Cherry R., *Insect Mythology* (Lincoln, New York, San Jose, Shanghai: Writers Club Press, 2000)

Krauss, Rosalind, *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge Mass: MIT, 1985)

LaBelle, B. & Migone C., *Writing Aloud: The Sonics of Language* (New York: Errant Bodies Press with Ground Fault Recordings, 2001)

Lacan, Jacques, *Écrits*, trans. Sheridan Alan (Lodnon: Routledge, 1980)

Lacan, Jacques, *The Ethics of Psychoanalysis (1959-1960): The Seminar of Jacques Lacan, Book VII*, ed. by Jacques-Alain Miller, trans. Porter, Dennis (London: Routledge, 1992)

Lacoue-Labarthe, Philippe, *Typography: Mimesis, Philosophy, Politics* (California: Stanford University Press, 1998)

Laplanche, Jean, *Essays on Otherness*, ed. by John Fletcher (London: Routledge, 1999)

Laplanche, Jean, *Seduction, Translation, Drives*, ed. by John Fletcher & Martin Stanton , trans. Stanton, Martin (London: Institute of Contemporary Arts, 1992)

Laplanche Jean, Pontalis, Jean-Bertrand, *The Language of Pscyhoanalysis* (London: Karnac Books, 1988)

Lauck, Joanne E., *The Voice of the Infinite in the Small: Revisioning the Insect-Human Connection* (USA: Suan Raus & Co, 1998)

Leiris, Michel, *Manhood: A Journey from Childhood into the Fierce Order of Virility*, trans. Howard, Richard (Chicago, London: The University of Chicago Press, 1984)

Leiris, Michel, *Rules of the Game, Vol. 2: Scraps*, trans. Davis, Lydia (Baltimore, London: The John Hopkins University Press, 1997)

McCallion, Michael, *The Voice Book* (London: Faber & Faber, 1988)

McEvilly, Thomas, *Sculpture in the Age of Doubt* (New York: Allworth Press, 1999)

Melvill, A.D., *Ovid Metamorphoses* (Oxford: Oxford University press, 1986)

Merleau-Ponty, Maurice, *Difference, Materiality, Painting,* ed. by V.M. Foti (New Jersey: Humanities Press, 1996)

Nancy, Jean-Luc, *The Birth to Presence*, ed. by Werner Hamacher & David Wellbery, trans. Holmes Brian & others (Stanford, California: Stanford University Press, 1993)

Nancy, Jean-Luc, *Being Singular Plural*, trans. Richardson, R. & O'Bryan, Anne (Stanford, California: Stanford University Press, 2000)

Neu, Jerome, ed., *The Cambridge Companion to Freud*, (Cambridge: Cambridge University Press, 1991)

Nouvet, Clair, ed., *Yale French Studies: Literature and the Ethical Question* (New Haven: Yale University Press, 1991)

O'Donnell, Patrick, *Echo Chambers: Figuring Voice in Modern Narrative* (Iowa City: University of Iowa Press, 1992)

Osmond-Smith, David, *Luciano Berio: Two Interviews with Rossana Dalmonte and Bálint András Varga* (London, New York: Marion Books, 1981)

Ovid, *Metamorphoses*, trans. Simpson, M., (Amherst: University of Massachusetts Press, 2001)

Pinchin, Calvin, *Issues in Philosophy* (London: MacMillan Education Ltd, 1990)

Rabinow, Paul, ed., *The Foucault Reader: An Introduction to Foucault's Thought*, (New York, London, Toronto, Victoria: Penguin Books, 1984)

Rahn, John, *Music Inside Out: Going too far in Musical Essays* (Australia, Canada, France, Germany, India, Japan, Luxembourg, Malaysia, The Netherlands, Russia, Singapore, Switzerland: G+B Arts International, 2001)

Ree, Jonathan, *I See a Voice: Language, Deafness and the Senses* (London: Harper Collins, 1999)

Richardson, Phil, *Bats* (London: The Natural History Museum, 2002)

Sayre, Kenneth M., *Belief and Knowledge: Mapping the Cognitive Landscape* (New York, Oxford: Rowman & Littlefield Publishers Inc, 1997)

Serres, Michel, *The Parasite*, trans. Schehr, Lawrence, R. (Baltimore & London: The John Hopkins University Press, 1982)

Serres, Michel, *Genesis*, trans. James, G., Nielson, J. (USA: The University of Michigan Press, 1995)

Serres, Michel, *Hermes: Literature, Science, Philosophy*, ed. by J.V.Harari & D.F.Bell (Baltimore, London: The John Hopkins University Press, 1982)

Serres, Michel, *The Troubadour of Knowledge*, trans. Glaser, S.F., Paulson, W. (USA: The University of Michigan Press, 1997)

Servi, Katerina, *Greek Mythology* (Athens: Ekdotike Athenon S.A., 2000)

Shapiro, Gary, *Earthwards: Robert Smithson and Art after Babel* (Berkeley, Londaon, Los Angeles: University of California Press, 1997)

Silverman, Kaja, *Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema* (US: Indiana University Press, 1988)

Singh, Kalu, *Sublimation* (Cambridge: Icon Books, 2001)

Sissa, Giulia, *Greek Virginity* (Cambridge, Massachusetts, London: Harvard University Press, 1990)

Smithson, Robert, *Robert Smithson: The Collected Writings*, ed. by Flam, Jack (California: University of California Press, 1996)

Solomon-Godeau, Abigail, *Male Trouble: A Crisis in Representation* (London: Thames & Hudson, 1997)

Tracey, David J., *Remaking Men: Jung, Spirituality and Social Change* (London, New York: Routledge, 1997)

Taylor , Paul, *Dutch Flower Painting, 1600-1720* (New Haven and London: Yale University Press, 1995)

Valery, Paul, *Poems: On Poets and Poetry*, trans. Paul, David (London: Routledge & Kegan Paul, 1984)

Veenhoff, A. & Smolenaars M., 'Maria Sybilla Merian's Flowers and Insects', in *Antiquarian Book Monthly, Vol. 25, No.5* (Oxford: ABMR, May 1998)

Winnicott, D.W., *Through Paediatrics to Psychoanalysis: Collected Papers* (London: Karnac Books, 1977)

Woold, Virginia, *The Death of the Moth & Other Essays*, (London: The Hogarth Press, 1942)

Young, Mark, *The Natural History of Moths*, (London: T & AD Poyster Ltd, 1997)

World Wide Web Resources

Anatomy of the Human Ear, Eye, Mouth, Throat and Reproductive System

Jan 2003

2nd http://www.bartleby.com/107/1000.html
Archive of Henry Gray's Anatomy of the Human Body (1918)

http://www.bartleby.com/107/224.html
The Organ of Sight

http://www.bartleby.com/107/225.html
The Tunics of the Eye

http://www.bartleby.com/107/227.html
The Accessory Organs of the Eye

http://www.bartleby.com/107/230.html
The Middle Ear or Tympanic Cavity

http://www.bartleby.com/107/229.html
The External Ear

http://www.bartleby.com/107/228.html
The Organ of Hearing

http://www.bartleby.com/107/232.html
The Internal Ear

http://www.bartleby.com/107/234.html
The common Integument

8th http://www.augie.edu/perry/ear/ear.htm
Virtual Tour of the Ear

Sep

http://www.bbc.co.uk/science/humanbody/body/interactives/lifecycle/teenagers/index

10th .shtml?boyVoiceGo
Information on the human voice

http://www.hearingresearch.org/Dr.Ross/Tinnitus.htm
Information on tinnitus and hyperacousis by Dr. Mark Ross

Nov 2004

8th http://www.pathguy.com/gynhisto.htm
Female Reproductive System

http://www.clearpassage.com/Blocked_tubes.htm
Female Reproductive System

http://www.encyclopedia.com/html/f1/fallopia.asp
Female Reproductive System

http://www.innerbody.com/text/repo03.html
Female Reproductive System

Artists' Interviews

Oct 2003
20th http://www.bjork.com/grapewire/?id=442;year=2003
Rockin' on and on and on. Expert from an interview with Bjork as it appeared in magazine Rockin' On Summer Festival Special 03.

http://www.researchpubs.com/books/angrexc1.shtml
Angry Women. San Francisco: Re/Search Publications, 1991. Expert from an interview with Diamanda Galas.

http://meredithmonk.org/monk/index.html
Information on Meredith Monk's work at The House Foundation.

Cellular Technology and Mobile Telecommunication

Aug 2004
19th http://scis.nova.edu/~raciti/cellular.html

www.kannel.org

20th www.zak.co.il

www.directindustry.com

www.atis.org

Critical Essays

Oct 2003
8th http://www.uga.edu/garev/
Website of academic journal *Georgia Review* John Brenkman, in 'Narcissus in the Text' in, vol. 30 (Summer 1976)

Mar 2005

12th http://members.aol.com/jmrussell/selfin.htm
The Self In Contemporary Psychoanalysis, essay by J.Michael Russell PhD Professor of Philosophy and Human Services, Research Psychoanalyst at University of California, Santa Barbara.

Moths and Insect Communication

Dec 2002

30th http://www.iitp.ru/lapshin/default_e.htm
Website of Dmitry N. Lapshin, Senior Research Assistant at the Institute for Information Transmission Problems, Russian Academy of Sciences

31st http://www.iitp.ru/lapshin/abstr6_e.htm
Retransmission of echo-like signals: method and results of studies on nocturnal moths

http://www.iitp.ru/lapshin/abstr17_e.htm
Tuning to and following the acoustical signal by the auditory system in noctuid moths

http://www.iitp.ru/lapshin/abstr2_e.htm
Frequency returning of tympanic organ of noctuid moth

http://www.iitp.ru/lapshin/abstr8_e.htm
Frequency tuning of the auditory system of acoustically active noctuids

http://www.iitp.ru/lapshin/abstr3_e.htm
Frequency tuning of the hearing system of noctuid moths

http://www.iitp.ru/lapshin/abstr9_e.htm
Ultrasonic emission in noctuid moths

http://www.iitp.ru/lapshin/abstr12_e.htm
Reactions of noctuid moths to retransmitted echo-like signals

http://www.iitp.ru/lapshin/abstr13_e.htm
The functions of the B-cell in the tympanic organs of noctuid moths

http://www.iitp.ru/lapshin/abstr7_e.htm
Sound sensitivity of silkworm moth Bombyx mori

http://www.iitp.ru/lapshin/abstr14_e.htm
On the stimulus parameters determining responses of cercal interneurons

http://www.iitp.ru/lapshin/abstr4_e.htm
Echolocation of noctuid moths

http://www.iitp.ru/lapshin/abstr6_e.htm
Orientation by means of echolocation in moths

Jan 2003

1st http://www.uky.edu/Agriculture/Entomology/entfacts/struct/ef609.htm
Information on domestic pests and microlepidoptera

June 2005

2nd http://www.bartleby.com/65/ea/earwig.html
Information on earwigs/dermaptera
http://urbanlegends.about.com/library/owt/blowt-earwig.htm
Information on earwigs

Mythology

Nov 2002

18th http://bible-history.com/tabernacle/TAB4The_Shekinah_Glory.htm
Echo

http://www.pantheon.org/articles/b/bat_kol.html
Echo

http://66.90.77.92/Ouranos/Ekho.html
Echo

Jun 2003

5th http://www.theoi.com
Comprehensive site on Greco-Roman mythology created by Aaron Atsma

Nov 2004

4th http://www.mythology.com/cronus.html
Cronus and Aphrodite

8th http://www.bookrags.com/notes/od/PART4.htm
The Odyssey

http://classics.mit.edu/Homer/odyssey.mb.txt
The Odyssey

http://www.archaeonia.com/religion/deities/sea_deities.htm#PROTEUS
Proteus and other deities of the sea

9th http://www.archaeonia.com/religion/cults/orphic.htm
Orpheus and Orphism

May 2005

31st http://www.biblestudents.com/endtimesarchives_sum03.cfm
Platonic notion of the soul
http://penelope.uchicago.edu/Thayer/L/Roman/Texts/Macrobius/Saturnalia/1*.html#1
Echo as celestial harmony in Macrobius's *Saturnalia*
http://www.ignetaconnect.com/
Echo as celestial harmony discussed in an essay by N. Moschovakis in *Milton Quarterly*

Nausea by JP Sartre

Dec 2004
6th http://www.sparknotes.com/lit/nausea/

http://www.press.uchicago.edu/Misc/Chicago/027961.html

http://www.antistudy.com/search.php?title=nausea

Second Law of Thermodynamics

Dec 2004
10th http://www.secondlaw.com/
By Frank L.Lambert, Professor Emeritus Occidental College, Los Angeles

http://hyperphysics.phy-astr.gsu.edu/hbase/thermo/seclaw.html

http://www.panspermia.org/seconlaw.htm
By Brig Klyce

Sound and Orientation

Oct 2004
1st http://web.media.mit.edu/~raffik/zero-g/aup/final.html

http://depts.washington.edu/otoweb/index.htm
Information of the centre of balance and the inner ear

~